South Dakota State University Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange

Agricultural Experiment Station Circulars

SDSU Agricultural Experiment Station

6-2009

South Dakota Agricultural Land Market Trends: 1991-2009

Larry Janssen
South Dakota State University, larry.janssen@sdstate.edu

Burton Pflueger
South Dakota State University, burton.pflueger@sdstate.edu

Follow this and additional works at: http://openprairie.sdstate.edu/agexperimentsta circ

Recommended Citation

Janssen, Larry and Pflueger, Burton, "South Dakota Agricultural Land Market Trends: 1991-2009" (2009). Agricultural Experiment Station Circulars. Paper 331.

http://openprairie.sdstate.edu/agexperimentsta_circ/331

This Circular is brought to you for free and open access by the SDSU Agricultural Experiment Station at Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. It has been accepted for inclusion in Agricultural Experiment Station Circulars by an authorized administrator of Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. For more information, please contact michael.biondo@sdstate.edu.

South Dakota

Agricultural Land Market Trends 1991–2009

The 2009 SDSU South Dakota Farm Real Estate Survey

South Dakota State University Agricultural Experiment Station U.S. Department of Agriculture

South Dakota

Agricultural Land Market Trends 1991–2009

The 2009 SDSU South Dakota Farm Real Estate Survey

Dr. Larry Janssen and Dr. Burton Pflueger

South Dakota State University Agricultural Experiment Station U.S. Department of Agriculture

CONTENTS

Summary	1
Introduction	3
Changing Economic Conditions In South Dakota	4
The 2008 South Dakota Agricultural Economy	4
South Dakota Employment	5
South Dakota Personal Income	5
South Dakota Agricultural Land Values, 2009	5
Procedures To Estimate And Report Land Values	5
All-Agricultural Land Value Estimates, 2009	6
Land Values And Value Changes By Type Of Land And Region	8
Cropland Values	8
Hayland Values	9
Pasture And Rangeland Values	9
Irrigated Land Values	9
Variation In Land Values By Land Productivity And County Clusters	10
Major Reasons For Purchase And Sale Of Farmland	14
Cash Rental Rates Of South Dakota's Agricultural Land	15
2009 Cash Rental Rates – Non-Irrigated Cropland	16
Cash Rental Rates – Hayland And Irrigated Land	20
2009 Cash Rental Rates – Rangeland And Pasture	20
Publications On Agricultural Land Rental Arrangements In South Dakota	21
Rates Of Return To South Dakota's Agricultural Land	21
Longer-Term Perspective On Farmland Market Changes, 1991–2009	23
Respondents' Assessment Of Factors Influencing Farmland Markets In South Dakota	24
Agricultural Land Market Expectations: Past And Prospective	25
List Of References	27
Appendix I. Survey Methods And Respondent Characteristics	28
Appendix II. Historical Data On Agricultural Land Values And Cash	
Rental Rates By Land Use By Region, South Dakota, 1991–2009	30

FIGURES

1. Nonirrigated agricultural land use patterns in South Dakota, statewide and regional	5
2. Average value of South Dakota agricultural land, Feb. 1, 2009, and 2008,	
and percent change from one year ago	6
3. Average value of South Dakota cropland and hayland, by region,	
February 2009, dollars per acre	8
4. Average value of South Dakota rangéland and tame pasture, by region,	
February 2009, dollars per acre	8
5. Reasons for buying farmland	15
6. Reasons for selling farmland	15
7. Average cash rental rate of South Dakota nonirrigated cropland, hayland, and rangeland,	
by region, 2009, dollars per acre	16
8a. Gross rent-to-value ratio by land use, 1991–2009	
8b. Net rate of return by land use, 1991–2009	29
9. Annual percentage change in all ag land values, 1991–1996, 1996–2001, and 2001–2009	24
10. Positive factors in the farm real estate market	25
11 Negative factors in the farm real estate market	95

TABLES

1. Average reported value and annual percentage change in value of South Dakota's
agricultural land by type of land by region, 2005–09
2. Average reported value per acre of agricultural land by South Dakota region,
county clusters, type of land, and land productivity, 2005–09
3. Reported cash rental rates of South Dakota agricultural land by type of land by region,
2005–09
4. Reported cash rental rates of South Dakota agricultural land by region and county
clusters, 2005–09 rates
5. Estimated rates of return to South Dakota agricultural land by type of land and by
region, 1991–2009
APPENDIX TABLES
ALLENDIA IADELO
1. Selected characteristics of respondents, 2009
2. Average reported value and annual percentage change in value of South Dakota
agricultural land by type of land by region, 1991–2009
3. Reported cash rental rates of South Dakota agricultural land by type of land by
region 1001-2000

FOREWORD

Agricultural land values and cash rental rates in South Dakota, by region and by state, are the primary topics of this report. The target audiences for this report are farmers and ranchers, landowners, agricultural professionals (lenders, rural appraisers, professional farm managers), and policy makers interested in agricultural land market trends. This report contains the results of the 2009 SDSU South Dakota Farm Real Estate Market Survey, the 19th annual SDSU survey developed to estimate agricultural land values and cash rental rates by land use in different regions of South Dakota.

We wish to thank our reviewers for their constructive comments on an earlier draft of this report. The reviewers are Dr. Martin Beutler and Dr. Gerald Warmann, Economics Extension Specialists; and Mr. Eric Ollila, Agricultural Communications Department, SDSU.

Mr. Emmanuel Opoku and Mr. Justin Harer, graduate students in Economics, also handled many of the daily tasks during the survey period and drafted updated tables and charts. We also wish to thank Penny Stover for developing and maintaining the mailing lists and for assistance with various survey and publication related tasks. Penny Stover is a secretary in the Economics Department.

General funding for this project is from the SDSU Agricultural Experiment Station project II-207: Economic analysis of agricultural land conservation, land use, and land market changes in South Dakota.

Finally, we wish to thank all of the 227 respondents who participated in the 2009 South Dakota Farm Real Estate Market Survey. Many have also participated in one or more past annual land market surveys. Without their responses, this report would not be possible.

The electronic version of this report is available at:

http://agbiopubs.sdstate.edu/articles/C275.pdf

South Dakota State University, South Dakota counties and U.S. Department of Agriculture cooperating. South Dakota State University is an Affirmative Action/Equal Opportunity Employer and offers all benefits, services, education and employment opportunities without regard for race, color, creed, religion, national origin, ancestry, citizenship, age, gender, sexual orientation, disability, or Vietnam Era Veteran status. C275, 550 copies printed at a cost of \$2.72 each. June 2009.



⊕

SUMMARY

The 2009 SDSU Farm Real Estate Market Survey report contains information on current agricultural land values and cash rental rates by land use in different regions of South Dakota, with comparisons to values from earlier years. Key findings are highlighted below.

• The most recent annual (2008 to 2009) change of 7.7% for all agricultural land values in South Dakota was the lowest rate of increase in this decade. This sudden change is directly related to impacts of the economic recession and financial turmoil during the latter months of 2008 and into 2009.

From 2001 to 2008, agricultural land values in South Dakota increased more than 10% each year, including more than 20% in two years during this decade. From 1991 to 2001, annual increases in South Dakota agricultural land values varied from 4 to 10%.

• Cropland values increased at a higher rate than per-acre values for other agricultural land uses.

Cropland values increased statewide by 9.6%, hayland and pasture values increased nearly 6%, and rangeland values increased 4.3%. Cropland values increased in all regions, while per-acre values for other land uses increased in most regions.

 Cash rental rates per acre for cropland, hayland, and rangeland/pasture increased statewide and in almost all regions from 2008 to 2009.

Statewide average cash rental rates increased \$9.20 per acre for cropland, \$2.75 per acre for hayland, and \$1.30 per acre for rangeland. In general, cash rental rate increases were strongest in the more cropland-intensive regions east of the Missouri River. Some weaknesses in cash rental rates are noted for hayland in several regions and for rangeland in the Northwest region.

• Current average rates of cash return on agricultural land in South Dakota increased slightly from their lowest point in 2008. This turnaround occurred because cash rental rates, for the first time this decade, increased at a higher rate than land values.

For 2009 the average ratio of gross cash rent to current land value for all agricultural land was 4.3%, for nonirrigated cropland 4.7%, and for rangeland only 4.1%. During the 1990s, the same ratios were 7.4% for all agricultural land, 8.0% for cropland, and 6.8% for rangeland.

- The longer-term trends in land values, cash rental rates, and cash rates of return are closely related to key economic factors. These factors include:
 - (1) Sharp declines in farm mortgage interest rates from early 2001 to late 2004 and continued relatively low mortgage interest rates.
 - (2) Federal farm program provisions of the 1996 and 2002 Farm Bills, especially the level of crop subsidies and the removal of planting restrictions.
 - (3) General economic conditions of low inflation rates, until the past year. From 1991 to 2007 the average annual inflation rate in the U.S. was less than 2.5%.

From 1991 to 2009 farmland values increased more rapidly than the rate of general price inflation in all regions of South Dakota. Also, cash rental rate increases provided underlying support for increases in land values. These basic economic factors, along with declining mortgage interest rates, attract interest in farmland purchases by investors and by farmers expanding their operations.

• Agricultural land values and average cash rental rates differ greatly by region and land use.

In each region per-acre values and cash rental rates are highest for irrigated land, followed in descending order by nonirrigated cropland, hayland, tame pasture, and native rangeland. For each land use, per-acre land values and cash rental rates are highest in the East-Central and Southeast regions and lowest in the western regions of South Dakota.

The average value of nonirrigated agricultural land (as of Feb. 2009) in South Dakota is \$1,121 per acre. Nonirrigated agricultural land varies from \$2,634 per acre in the East-Central to \$307 per acre in the Northwest region. Average nonirrigated cropland values vary from \$3,155 per acre in the East-Central to \$1,577 per acre in the Central region and \$428 per acre in the Northwest region. This is the first time that cropland values averaged more than \$3,000 per acre in any region of the state.

Average rangeland values vary from \$1,458 per acre in the East-Central to \$277 per acre in the Northwest. Within each region, differences in land productivity and land use account for substantial differences in per-acre values.

In 2009, the average value of nonirrigated cropland exceeds \$4,000 per acre in the Minnehaha-Moody County cluster and above \$3,000 per acre in two other eastern county clusters: 1) Clay-Lincoln-Turner-Union and 2) Brookings-Lake-McCook. Average cash rental rates for cropland were above \$135 per acre in the three county clusters noted above. These are the highest average land values and cash rental rates reported during the past 19 years of the SDSU Farm Real Estate Market Survey.

At the regional level, average cash rental rates per acre for cropland in 2009 vary from \$128.85 in the East-Central region to \$24.25 in the Southwest region. Average rangeland and pasture rental rates vary from \$49.60 in the East-Central region to \$10.40 per acre in the Northwest region.

• Farm expansion and investment potential continue as the major reasons for purchasing farmland, while retirement from farming, settling estates, and realizing gains from high sale prices are the major reasons for selling farmland.

Low interest rates and favorable financing, strong demand for farmland, and relatively high commodity prices were the major positive factors. Continued investor interest in farmland, federal farm programs and crop insurance, and shift of funds from the stock market were also listed. The prospects of lower commodity prices or land prices, rising input costs, economic recession, and heightened uncertainty and volatility in the economy were the main negative factors.

 Compared to the "booming market" psychology of recent years, respondents were much less optimistic about current and prospective land market conditions.

Depending on land use, between 12 to 18% of respondents reported declines in land values during the previous 12 months (Feb. 2008 to Feb. 2009), while nearly two-fifths reported land value declines from Oct. 2008 to Feb. 2009. A plurality of respondents, 38 to 48%, depending on land use, expected land values to decline in the next 12 months, while only 12 to 18% projected increasing land values, and the remainder projected no change. For several years prior to 2008, very few respondents reported either actual declines in land values during the previous year or prospects of declining values in the next year.

South Dakota

Agricultural Land Market Trends 1991–2009

Dr. Larry Janssen and Dr. Burton Pflueger¹

The 2009 SDSU Farm Real Estate Market Survey is the 19th annual survey of agricultural land values and cash rental rates by land use and quality in different regions of South Dakota. We report on the results of the survey and also include a discussion of factors influencing buyer/seller decisions and positive/negative factors impacting farmland markets. Publication of survey findings is a response to numerous requests by farmland owners, renters, appraisers, lenders, buyers, and others for detailed information on South Dakota farmland markets.

The 2009 estimates are based on reports from 227 respondents to the 2009 SDSU survey. Respondents are agricultural lenders, Farm Service Agency officials, rural appraisers, assessors, realtors, professional farm managers, and Extension agricultural educators. All are familiar with farmland market trends in their localities.

Copies of the SDSU survey were mailed in February and March 2009. The surveys requested information on cash rental rates and agricultural land values as of February 2009. Response rates, respondent characteristics, and estimation procedures are discussed in appendix I.

Results are presented in a format similar to surveys published by Janssen and Pflueger from 1991 through 2008. Regional information on land values and cash rents by land use (crop, hay, range, pasture, and irrigated crop/hay) is emphasized in each of these SDSU reports. Current-year findings are compared to those of earlier years.

This report contains an overview and may or may not reflect actual land values or cash rental rates unique to specific localities or properties. Readers should use this report as a general reference and rely on local sources for more specific details.

¹ Janssen and Pflueger are professors of economics, South Dakota State University, Janssen has teaching and research responsibilities in farmland markets and appraisal, economic development, and research methodology. Pflueger is an Extension farm financial management specialist and also teaches an undergraduate course on agricultural cooperatives.

² A major purpose of this survey is to report land values and cash rental rates by major uses of privately owned agricultural land, excluding farm building sites. The major nonirrigated land uses reported are crops, hay, tame pasture, and rangeland. Rangeland is native grass pasture, while tame pasture is seeded to introduced grasses. Agricultural land typically used for production of alfalfa hay, other tame hay, or native hay is considered hayland in this report. Cropland is agricultural land typically used for crop production other than hay production. Since most irrigated land in South Dakota is used for crop or hay production, we report the value and rental rates of irrigated land used for these purposes. These major land uses comprise nearly 98% of privately owned land in farms in South Dakota (Janssen, 1999).

CHANGING ECONOMIC CONDITIONS IN SOUTH DAKOTA

Most renters, buyers, and sellers of farmland continue to be local area residents, although there is greater outside interest in recent years. Land market trends are influenced by changing conditions in the general and agricultural economies and are strongly influenced by land market participants' expectations of future trends and the availability of debt or equity financing. Some key economic conditions in South Dakota are reviewed in this section.

The 2008 South Dakota agricultural economy

The general economy and the agricultural economy, especially, influence the agricultural real estate market. The following is a summary of the South Dakota agricultural economy for 2008 (which may have had an influence on the buyers and sellers of South Dakota agricultural real estate and could be reflected in the results of the 2009 survey).

South Dakota agricultural producers started 2009 with 8% more hogs and pigs and 5,000 more cattle on feed than they had at the beginning of 2008. At the beginning of 2009, all commodity prices for crops and livestock, except for hogs, were higher than in 2008, due primarily to continued high demand for crops.

For the 2008 cropping year, according to a March 1 survey by the South Dakota USDA National Agriculture Statistics Service, South Dakota producers intended to plant 7% fewer acres of corn, 28% more acres of soybeans, and 10% and 18% fewer acres of winter wheat and spring wheat, respectively. Related to spring planting intentions were indications that, as of March 30, topsoil moisture conditions were rated 20% short to very short and subsoil conditions were rated 30% short to very short. However, by June 1, drought ratings had been nearly completely removed from South Dakota by the U.S. Drought Monitor. Only 0.4% of South Dakota was rated to be in severe drought conditions and only 2.6% was rated to be in moderate drought conditions. The increased moisture helped range and pasture conditions to the point that 94% were rated fair to excellent as of June 1.

By August, according to an Aug. 12 information release by the South Dakota office of the USDA's National Ag Statistics Office, South Dakota's 2008 corn and sovbean production was forecast to be even larger than in 2007. As of Aug. 12, 2008, the corn production forecast was up 4% from 2007's production, due to higher average yield expectation of 135 bushels per acre, which was an increase of 14 bushels per acre from the yield in 2007. At the same time, soybean production for South Dakota was forecast to be up 24% due to more acres for harvest. Soybean yield was forecast to be 41 bushel per acre, down 1 bushel from 2007's record-high per-acre yield. By the end of the year, corn production was forecast to still be higher than 2007, but not as high as the August forecast. However, at the end of 2008, prices received by South Dakota farmers for crops were higher than the previous year, except for wheat.

This 2008 history of the South Dakota agricultural economy may have influenced the opinions and actions of buyers and sellers in the South Dakota farm real estate market. Financial turmoil in the stock market and in the national credit markets in the latter months of 2008 was also a contributing factor—but the extent of its impact on the farm real estate market is much debated. In many regions of the United States, the national credit crisis, which accelerated in the last quarter of 2008, had a major impact on the availability of commercial loans, home mortgage loans, and consumer credit, and the crisis was a major causal factor of a recession in the U.S. economy.

The questions many wondered about were how deep the national recession was going to be and what would be the extent of negative impacts in South Dakota. Most South Dakotans were aware that the Federal Reserve, along with the U.S. Congress and the President of the United States, were exploring using extraordinary tools to try to avoid a deep recession. However, South Dakotans also had positive general economic news in spite of the national recession.

South Dakota Employment

Jobs were added through much of 2008 and yearover-year growth remained positive. In November 2008 it was reported that total nonfarm employment was up 1.05%, or 4,300 jobs, over November 2007, and for the time frame of December 2007 to November 2008, nonfarm employment grew 1.40%, or 5,680 jobs, from the same period the year before. The 3.4% unemployment rate in South Dakota was the third lowest in the nation in November 2008. while the U.S. unemployment rate was 6.7% in November 2008. However, the unemployment rate in South Dakota increased to 4.6% by February 2009 (when the Farmland Market Survey was conducted), compared to the U.S. unemployment rate of 8.1%. Economic forecasts were projecting rising unemployment rates, for at least several months, throughout the United States.

South Dakota Personal Income

From the third quarter of 2007 to the third quarter of 2008, South Dakota's personal income reported grew at a rate of 4.5%, which ranked 13th nationally. South Dakota's growth rate of 4.5% was higher than both the 3.7% United States' income growth and the 4.2% income growth of the seven-state Plains region (Iowa, Kan., Minn., Mo., Neb., N.D., and S.D.) over the same time period.

For the time frame preceding the 2009 agricultural land market survey, while most respondents were aware of the nationwide credit crisis and of a severely stressed national housing market, respondents were also aware that the farm economy remained strong despite concerns, during the last two quarters of 2008, about higher input costs and the potential for income and profits to be lower in the 2009 operating year.

SOUTH DAKOTA AGRICULTURAL LAND VALUES, 2009

Procedures to estimate and report land values

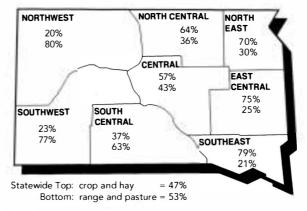
Respondents to the 2009 South Dakota Farm Real Estate Market Survey estimated the per-acre value of nonirrigated cropland, hayland, rangeland, tame pastureland, and irrigated land in their county and the percent change in value from one year earlier.

Responses for uonirrigated laud uses are grouped into 8 agricultural regions (fig.1). The six regions in eastern and central South Dakota correspond with USDA Agricultural Statistics Districts. In western South Dakota, farmland values and cash rental rates are reported for the Northwest and Southwest regions. Land values and cash rental rates are reported only for privately owned land and should not be considered as estimated values for tribal or federal lands.

Irrigated land is only 1% of farmland acres in South Dakota. Responses for irrigated land values and rental rates are regrouped into 6 regions: Western, Central, North-Central, Northeast, East-Central, and Southeast. The Western region has reports from the Northwest, Southwest, and South-Central regions.

The average value per acre and percent change in value were obtained for each agricultural land use in each region. Regional and statewide all-land (nonirrigated land) value estimates are weighted averages based on the relative acreage and value of each nonirrigated agricultural land use in each region of South Dakota. In this report, land-use acreage weights for each region and statewide were developed from data reported in the 2002 Census of Agriculture and related sources (appendix I). These land-use acreage weights have considerable impacts on regional and statewide estimates of all nonirrigated land values.

Fig 1. Nonirrigated agricultural land use patterns in South Dakota, statewide and regional.



Source: Compiled from land use data in 2002 Census of Agriculture and related surveys

Regional differences in all-agricultural land values are primarily related to major differences in 1) agricultural land productivity among regions, 2) per-acre values of cropland and rangeland in each region, and 3) the proportion of cropland and rangeland in each region. More than 80% of farmland acreage in each region is cropland or rangeland, and most of the remainder is tame pasture or hay. Native rangeland is the dominant land use in western South Dakota, while most agricultural land in eastern South Dakota is nonirrigated hay or cropland (fig. 1).

Statewide, an estimated 47% of private farmland acres are cropland or hayland, and 53% is rangeland or tame pasture (fig. 1). In summary, statewide cropland values are greatly influenced by values estimated in the North-Central and three eastern regions, while statewide rangeland values are heavily influenced by values reported in the three regions west of the Missouri River.

All-agricultural land value estimates, 2009

As of February 2009, the average value of all agricultural land in South Dakota was \$1,121 per acre, a 7.7% increase in value from one year earlier (fig. 2 and table 1).

Agricultural land values increased in all regions of South Dakota, varying from 4.1% in the Northwest region to 9.3% in the Southwest region.

The statewide change of 7.7% is the slowest rate of increase since 2000, when land values increased only 6.3% from one year earlier. From 2001 to 2008, annual increases in all agricultural land values varied from 9.1% in 2001 to 22.5% in 2008! Overall, agricultural land values in South Dakota have doubled since 2004 and have increased 5-fold since 1991 (appendix table 2).

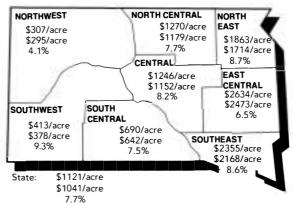
The all-land average values are highest in the eastern regions: per-acre values range from \$2,634 in the East-Central region, to \$2,355 in the Southeast region, to \$1,863 in the Northeast region. Per-acre increases from 2008 to 2009 varied from \$149 per acre in the Northeast region to \$187 per acre in the Southeast region (table 1). The three eastern regions mentioned above contain the most-productive

land in South Dakota. Cropland and hayland are the dominant agricultural land uses in eastern South Dakota, varying from 70% of farmland acres in the Northeast region to 79% in the Southeast region (fig. 1).

Average per-acre agricultural land values in the North-Central and Central regions are much higher than corresponding land values in western and south-central South Dakota, and considerably lower than average land values in the eastern regions. Average land values were \$1,270 per acre in the North-Central region and \$1,246 per acre in the Central region, which is an increase of nearly \$90 per acre in both regions from 2008 to 2009 (table 1). Land values are slightly higher in the North-Central region, due to the greater proportion of crop and hayland.

Agricultural land values are much lower in regions west of the Missouri River than in the eastern and central regions of South Dakota. The average value per acre varies from \$690 in the South-Central region to \$307 per acre in the Northwest region, respectively. The per-acre increase in land values varied from \$48 per acre in the South-Central region to \$12 per acre in the Northwest region (table 1). Rangeland and pasture are the dominant agricultural land uses.

Fig 2. Average value of South Dakota agricultural land, February 1, 2008 and 2009, and percent change from one year ago.



Regional and statewide average values of agricultural land are the weighted averages of dollar value per acre and percent change by proportion of acres of each nonirigated land use by region.

Top: Average per-acre value—February 1, 2009 Middle: Average per-acre value—February 1, 2008 Bottom: Annual percent change in per-acre land value

Source: 2009 South Dakota Farm Real Estate Market Survey, SDSU.

Table 1. Average reported value and annual percentage change in value of South Dakota agricultural land by type of land by region, 2005–2009.

	South-	East-	North-	North-		South-	South-	North-	
Type of Land	east	Central	east	Central	Central	Central	west	west	STATE
	b		dollar	s per acre					
All Agricultural Land (nonirrigate		2/24	10/2	1270	124/	400	442	207	1121
Average value, 2009	2355	2634	1863	1270	1246	690	413	307	1121
Average value, 2008	2168	2473	1714	1179	1152	642	378	295	1041
Average value, 2007	1768	1946	1422	945	899	521	322	285	850
Average value, 2006	1583	1643	1174	849	803	462	286	256	743
Average value, 2005	1372	1427	1029	736	711	414	275 9.3%	211 4.1%	650 7.7%
Annual % change 09/08	8.6%	6.5%	8.7%	7.7%	8.2%	7.5%	9.3%	4.1%	7.7%
Nonirrigated Cropland									
Average value, 2009	2741	3155	2305	1673	1577	1007	596	428	1900
Average value, 2008	2510	2894	2076	1532	1450	904	502	399	1733
Average value, 2007	1999	2244	1762	1187	1086	702	426	367	1375
Average value, 2006	1817	1914	1448	1088	986	612	387	342	1211
Average Value, 2005	1556	1659	1255	967	871	568	383	316	1064
Annual % change 09/08	9.2%	9.0%	11.0%	9.2%	8.8%	11.4%	18.7%	7.3%	9.6%
Ğ									
Rangeland (native)									
Average value, 2009	1258	1458	1125	755	898	570	358	277	530
Average value, 2008	1239	1539	1100	714	836	544	339	271	508
Average value, 2007	1073	1293	889	634	708	448	295	265	448
Average value, 2006	925	1055	751	548	599	397	255	234	386
Average value, 2005	781	844	667	458	552	346	241	185	332
Annual % change 09/08	1.5%	-5.3%	2.3%	5.7%	7.4%	4.8%	5.6%	2.2%	4.3%
Pasture (tame, improved)									
Average value, 2009	1378	1802	1373	827	1042	571	429	314	857
Average value, 2007 Average value, 2008	1365	1675	1304	795	943	571	384	307	809
Average value, 2007	1167	1461	987	698	760	524	303	297	684
Average value, 2006	1085	1166	843	598	711	425	283	282	596
Average Value, 2005	937	1018	730	465	610	397	291	227	519
Annual % change 09/08	1.0%	7.6%	5.3%	4.0%	10.5%	0.0%	11.7%	2.3%	5.9%
20									
Hayland									
Average value, 2009	2098	2116	1387	962	1109	720	488	373	1142
Average value, 2008	1871	2127	1347	939	1050	649	450	334	1079
Average value, 2007	1659	1637	1028	750	815	525	356	327	875
Average value, 2006	1383	1371	831	640	758	499	346	300	758
Average value, 2005	1312	1203	780	515	612	451	324	270	675
Annual % change 09/08	12.1%	-0.5%	3.0%	2.4%	5.6%	10.9%	8.4%	11.7%	5.8%
	South-	East	North-	North					
Type of Land	east	Central	east	Central	Central	Western	STATE		
200			dollar	s per acre					
Irrigated land									
Average value, 2009	3373	3429	3085	2083	2095	1162	2240		
High Productivity	3975	4365	3750	2575	2355	1378			
Low Productivity	2722	2561	2312	1678	1725	934			
Average value, 2008	3020	3070.9	2681	1607	2156	925	1970		
Average value, 2007	2547	2649	2100	1531	1578	951	1699		
Average value, 2007 Average value, 2006	2354	2305	1610	1329	1422	871	1518		
Average value, 2005	1974	2097	1566	1017	1322	970	1403		
Average value, 2004	1793	1678	1259	1210	865	782	1191		
Annual % change 09/08	11.7%	11.7%	15.1%	29.6%	-2.8%	25.6%	13.7%		
aa anange a // ou	70	, , ,			2.070				

Source: 2009 and earlier South Dakota Farm Real Estate Market Surveys

Statewide average land values are based on 2002 land use weights

LAND VALUES AND VALUE CHANGES BY TYPE OF LAND AND REGION

In each region, per-acre values are highest for irrigated land, followed by nonirrigated cropland, hayland, tame pasture, and native rangeland. For each nonirrigated land use, per-acre land values are highest in the three eastern regions and lowest in the Northwest, Southwest, and South-Central regions (figs. 3 and 4; table 1).

These regional differences in land values by land use have largely remained consistent over time and are closely related to climate patterns, soil productivity differences, and crop/forage yield differences across the state.

Cropland values

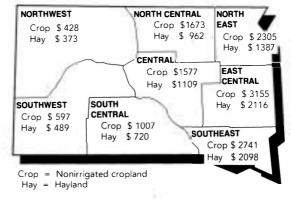
The weighted average value of South Dakota's nonirrigated cropland (as of Feb. 2009) is \$1,900 per acre, a 9.6% increase from 2008 (table 1). This is the first time since 2003 that cropland values increased by less than 10%. Statewide per-acre cropland values have more than doubled since 2004 and have quadrupled since 1996.

Cropland values increased in all regions of South Dakota, and there was little variation in percentage rates of increase (from 8.8 to 11.4%) across the six eastern and central regions. In these six regions, the rates of increase from 2008 to 2009 were much lower than rates of increase reported from 2007 to 2008. However, the percentage increase in cropland values for the Southwest region (+18.7%) and the Northwest region (+7.3%) were fairly similar to rates of increase reported for the previous year.

For the first time, average cropland values exceeded \$3,000 per acre in all South Dakota regions. The East-Central region had the highest cropland value of \$3,155 per acre, followed by cropland values of \$2,741 in the Southeast region and of \$2,305 in the Northeast region. The per-acre increase in cropland values was \$261 in the East-Central region and about \$230 in the Southeast and Northeast regions (fig. 3; table 1; appendix table 2).

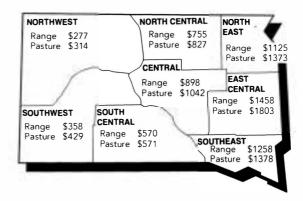
The Northeast, East-Central, and Southeast regions contain 45% of South Dakota's cropland acres, while the North-Central and Central regions contain 33%

Fig 3. Average value of South Dakota cropland, and hayland, by region, February 2009, dollars per acre.



Source: 2009 South Dakota Farm Real Estate Market Survey, SDSU

Fig 4. Average value of South Dakota rangeland and tame pasture, by region, February 2009, dollars per acre.



Source: 2009 South Dakota Farm Real Estate Market Survey, SDSU

of South Dakota's cropland acres. Corn and soybeans are the major crops in most counties in the eastern regions, while corn, soybeans, wheat, sunflowers, and some small grains are the major crops in most counties of the North-Central and Central regions.

Average cropland values of \$1,673 per acre in the North-Central region are higher than the average of \$1,577 per acre in the Central region. In both regions, average cropland values increased more than \$125 per acre from 2008 to 2009.

Cropland values are considerably lower in the three regions west of the Missouri River. As of February 2009, cropland values averaged \$1,007 per acre in the South-Central region, a \$103 per acre increase from 2008. This is the first time that average crop-

land values exceeded \$1,000 per acre in the South-Central region. In the western regions, average cropland values were much lower, varying from \$596 per acre in the Southwest to \$428 per acre in the Northwest.

The South-Central, Southwest, and Northwest regions contain 22% of the state's cropland acres. Wheat, corn, and grain sorghum are important crops in the South-Central region, while wheat is the dominant crop in the two western regions. In most years since 2000, cropland values have been increasing at a much slower rate in the two western regions compared to the more cropland-intensive regions east of the Missouri River.

Hayland values

South Dakota hayland values averaged \$1,142 per acre as of February 2009, a 5.8% increase from one year earlier (table 1). The strongest annual increases above 10% were reported in the Southeast, South-Central, and Northwest regions. Changes of 3% or less were reported in the Northeast, North-Central, and East-Central regions. Statewide, hayland values have more than doubled since 2004 and have quadrupled since 1995.

Average hayland values are highest in the East-Central and Southeast regions, with per-acre values of \$2,116 and \$2,098, respectively. Hayland values are considerably lower in the other regions east of the Missouri River, varying from \$1,387 in the Northeast, to \$1,109 in the North-Central, to \$962 per acre in the Central region.

Substantially lower values of hayland are found in all regions west of the Missouri River, varying from \$720 in the South-Central, to \$488 in the Southwest, to \$373 per acre in the Northwest region (fig. 3 and table 1). Alfalfa hay is the most common hay in the eastern regions, while native hay is more common in the central and western regions.

Pasture and rangeland values

In February 2009, the value of South Dakota native rangeland averaged \$530 per acre, while the average value of tame pasture was \$857 per acre (table 1). Native rangeland is concentrated in the western and central regions of South Dakota, while tame pasture is concentrated in the central and eastern regions.

The statewide average rangeland and tame pasture values increased 4.3% and 5.9%, respectively, during the past year (Feb. 2008 to Feb. 2009). This is the first year since 2001 that South Dakota rangeland and tame pasture values have increased less than 10%. Statewide, rangeland and tame pasture values have more than doubled since 2003 and quadrupled in per-acre value from 1994.

Average rangeland values are highest in the East-Central and Southeast regions (\$1,458 and \$1,258 per acre, respectively) and lowest in the Southwest and Northwest region (with average values of \$358 and \$277 per acre, respectively). In other regions, average rangeland values vary from \$570 per acre in the South-Central region to \$1,125 per acre in the Northeast region (fig. 4 and table 1).

In most regions, average values of tame pasture varied from 9 to 23% higher than the average value of rangeland. However, due to differences in regional concentration, the statewide average value of tame pasture was 62% higher than the average value of rangeland. Three-fourths of rangeland acres are located in counties west of the Missouri River, compared to less than half of tame (improved) pasture acres.

In the cropland-intensive regions of eastern South Dakota and in the North-Central region, the average per-acre value of nonirrigated cropland varies from 2.05 to 2.22 times the average value of native rangeland. In the more rangeland-intensive central and western regions, the average per-acre value of cropland varies from 1.55 to 1.76 times the average value of rangeland. In all regions, tame-pasture land values per acre are between the rangeland and hayland values.

Irrigated land values

Irrigated land value reports are consolidated into six regions (table 1). Very few irrigated land reports were received from respondents in the three regions west of the Missouri River, which made it necessary to combine reports from these regions. Irrigated land in the western regions is predominantly gravity-irrigated hay- and cropland in counties adjacent to the Black Hills and some center-pivot irrigated land in south-central counties. In all other regions, the value of irrigated land was reported for center-pivot

irrigation systems, excluding the value of the center pivot.

We continue to caution readers that irrigated land value data are less reliable than data on land values reported for other agricultural land uses. Irrigated land is not common (less than 1% of total acres) in most regions, and there are few sales of irrigated land tracts. Consequently, only one-third of all respondents (78) were familiar with and able to provide information on irrigated land values.

Irrigated land values increased in all regions except the Central region. Statewide average irrigated land values are \$2,240 per acre, a 13.7% increase from one year earlier. Irrigated land values vary from an average of \$3,429 and \$3,373 per acre, respectively, in the East-Central and Southeast regions, to \$1,162 per acre in the Western region (table 1). This is the first year that average irrigated land values exceeded \$3,000 per acre in all three eastern regions and more than \$2,000 per acre in both the Central region and the North-Central region.

VARIATION IN LAND VALUES BY LAND PRODUCTIVITY AND COUNTY CLUSTERS

Within each region and for each nonirrigated agricultural land use, there is considerable variation in land values. In this section, we report the February 2009 per-acre values of average quality, high-productivity, and low-productivity land by agricultural land use by region and by county clusters within several regions (table 2).

A "county cluster" is a group of counties within the same region that have similar agricultural land use and value characteristics. Three county clusters are identified in each of the following regions: Southeast, East-Central, Northeast, North-Central, and Central. Land values are not reported for county clusters in regions west of the Missouri River because there are too few reports for most county groupings. This survey is not designed to reflect the substantially higher land values in or near the Black Hills.

Substantial variation in per-acre land value occurs by degree of land productivity for each land use in each

region. For example, 2009 cropland values in the East-Central region vary from an average of \$2,354 per acre for low-productivity cropland to \$3,953 per acre for high-productivity cropland. At the other extreme, the average value of low-productivity cropland in the Northwest region is \$336 per acre, while the value of high-productivity cropland is \$523 per acre. Across regions, average values of low-productivity cropland were 50 to 65% of the average values of high-productivity cropland.

Rangeland values in the East-Central region vary from an average of \$1,198 per acre for low-productivity rangeland to \$1,788 per acre for high-productivity rangeland. At the other extreme, in the Northwest region the average value of low-productivity rangeland is \$223 per acre, compared to \$346 per acre for high-productivity rangeland. In most regions, the average value of low-productivity rangeland is 63 to 67% of the average value of high-productivity rangeland (table 2).

In 2009, average nonirrigated cropland values were above \$4,000 per acre in the Minnehaha-Moody county cluster and above \$3,000 per acre in both the Clay-Lincoln-Turner-Union (CLTU) county cluster and the Brookings-Lake-McCook county cluster. Cropland values were above \$2,000 per acre in all county clusters of the Northeast region and one additional cluster in the Southeast, East-Central, and North-Central regions (table 2). As recently as 2006, average cropland values exceeded \$2,000 per acre in only three county clusters; this happened in nine county clusters in 2009.

In 2009, average cropland values in the East-Central and Southeast regions varied from \$4,064 per acre in the Minnehaha-Moody county cluster to \$1,807 per acre in the Charles Mix-Douglas county cluster. Similar patterns, but much lower values, also occur for rangeland and pasture in the East-Central and Southeast regions. For example, rangeland values varied from an average of \$1,903 per acre in the Minnehaha-Moody county cluster to \$1,184 per acre in the Charles Mix-Douglas county cluster.

In the Northeast region, the average values of cropland in 2009 varied from \$2,024 in the Clark-Day-Marshall county cluster to \$2,608 per acre in the Codington-Deuel-Hamlin cluster. Similar land

Table 2. Average reported value per acre of agricultural land by South Dakota region, county clusters, type of land, and land productivity, February, 2005–2009.

<u> </u>		Sou	theast		East Central					
Agricultural Land Type and Productivity	All	Clay Lincoln Turner Union	Bon Homme Hutchinson Yankton	Charles Mix Douglas	All	Minnehaha Moody	Brookings Lake McCook	Sanborn Davison Hanson Kingsbury Miner		
				dollars p	er acre					
Nonirrigated Cropland										
Average 2009	2741	3337	2651	1807	3155	4064	3099	2295		
High Productivity	3580	4587	3190	2298	3953	5082	3936	2839		
Low Productivity	2022	2391	2024	1371	2354	2992	2309	1754		
Average 2008	2510	3246	2304	1656	2894	3778	2823	2250		
Average 2007	1999	2527	1881	1253	2242	2892	2288	1874		
Average 2006	1817	2266	1603	1219	1914	2595	2019	1434		
Average 2005	1556	2021	1283	1042	1659	2196	1665	1307		
Rangeland (native)										
Average 2009	1258	1325	1244	1184	1458	1903	1379	1204		
High Productivity	1430	1539	1380	1339	1788	2397	1671	1446		
Low Productivity	1043	1077	1071	963	1198	1559	1077	1038		
Average 2008	1239	1384	1231	1091	1539	1790	1602	1351		
Average 2007	1073	1264	1032	870	1293	1547	1292	1204		
Average 2006	925	1047	881	791	1055	1432	1041	973		
Average 2005	781	851	778	686	844	910	810	838		
Pastureland (tame, impro	oved)							900		
Average 2009	1378	1513	1289	1253	1803	2531	1590	1489		
High Productivity	1600	1794	1510	1378	2096	2750	1935	1788		
Low Productivity	1146	1235	1063	1088	1520	2219	1245	1285		
Average 2008	1365	1625	1362	1055	1675	2105	1756	1368		
Average 2007	1167	1389	1085	927	1461	1703	1440	1403		
Average 2006	1085	1242	986	933	1166	1453	1134	1063		
Average 2005	937	1108	839	771	1018	1156	936	1007		
Hayland										
Average 2009	2098	2377	2111	1569	2116	2952	1977	1382		
High Productivity	2483	2870	2522	1724	2658	3819	2451	1653		
Low Productivity	1576	1744	1663	1164	1653	2325	1510	1092		
Average 2008	1871	2353	1770	1409	2127	2826	1987	1694		
Average 2007	1659	2084	1669	1000	1637	2265	1685	1328		
Average 2006	1383	1700	1312	932	1371	2250	1315	1037		
Average 2005	1312	1759	1111	805	1203	1716	1149	904		

Source: South Dakota Farm Real Estate Market Survey, SDSU, 2009 and earlier Irrigation land values are not reported in this table, due to insufficient number of reports in most county clusters ** Insufficient number of reports to make estimates by county cluster.

Table 2. (continued

Table 2. (continued		Nort	heast		North Central					
		Codington		Clark			Edmund	Campbell		
Agricultural Land		Deuel	Grant	Day		Brown	Faulk	Potter		
Type and Productivity	All	Hamlin	Roberts	Marshall	All	Spink	McPherson	Walworth		
				dollars p	er acre					
Nonirrigated Cropland										
Average 2009	2305	2608	2294	2024	1673	2350	1187	998		
High Productivity	3194	3416	3088	3037	2265	2839	1543	1307		
Low Productivity	1606	1804	1519	1463	1266	1754	930	766		
Average 2008	2076	2274	2107	1822	1532	2318	1168	957		
Average 2007	1762	1856	1866	1558	1187	1691	951	814		
Average 2006	1448	1541	1557	1298	1088	1498	818	775		
Average 2005	1255	1308	1349	1104	967	1342	766	683		
Rangeland (native)										
Average 2009	1125	1230	1063	1045	755	976	702	478		
High Productivity	1336	1438	1222	1295	914	1141	844	646		
Low Productivity	844	894	844	787	585	744	575	355		
Average 2008	1100	1202	1143	937	714	932	686	519		
Average 2007	889	937	912	808	634	798	611	400		
Average 2006	751	763	771	728	548	704	489	422		
Average 2005	667	654	673	678	458	580	459	292		
Pastureland (tame,impro	ved)		3.0							
Average 2009	1373	1479	1425	1215	827	1055	735	581		
High Productivity	1583	1705	1650	1398	1001	1276	917	680		
Low Productivity	1043	1058	1125	985	625	845	600	334		
Average 2008	1304	1362	1260	1224	795	1004	810	617		
Average 2007	987	1027	1000	908	698	910	694	408		
Average 2006	843	834	860	847	598	760	537	437		
Average 2005	730	744	720	721	465	605	454	290		
Hayland										
Average 2009	1387	1600	1192	1282	962	1295	744	643		
High Productivity	1847	2141	1554	1713	1144	1475	946	804		
Low Productivity	1030	1189	908	940	687	887	603	439		
Average 2008	1347	1414	1558	1077	939	1077	753	640		
Average 2007	1028	1084	1013	964	749	1020	663	474		
Average 2006	831	924	844	736	640	814	591	477		
Average 2005	780	809	743	776	515	678	521	326		

Table 2. (continued)

		Central			South Central	South West	North West
-		Central	Buffalo		Central	******	******
		Aurora	Brule				
Agricultural Land		Beadle	Hand	Hughes			
Type and Productivity	All	Jerauld	Hyde	Sully	All	All	All
				dollars per acre			
Nonirrigated Cropland							
Average 2009	1577	1768	1379	1440	1007	597	428
High Productivity	1928	2169	1616	1840	1275	723	523
Low Productivity	1256	1385	1065	1240	771	453	336
Average 2008	1450	1601	1315	1300	904	502	399
Average 2007	1086	1110	1139	977	702	426	368
Average 2006	986	1068	994	858	612	387	342
Average 2005	871	873	888	846	568	383	316
Rangeland (native)							
Average 2009	898	1030	797	788	570	35.8	277
High Productivity	1087	1227	985	963	679	453	346
Low Productivity	712	758	669	688	442	263	223
Average 2008	836	998	774	636	544	339	271
Average 2007	708	780	821	459	448	295	265
Average 2006	599	677	611	450	397	255	234
Average 2005	552	608	590	388	346	241	185
Pastureland							
(tame,improved)							
Average 2009	1042	1190	845	**	571	429	314
High Productivity	1286	1458	1016	**	674	518	382
Low Productivity	825	953	685	**	449	309	246
Average 2008	943	1060	858	810	571	384	307
Average 2007	760	854	854	481	524	303	297
Average 2006	711	771	728	531	425	283	282
Average 2005	610	683	606	411	397	291	227
Hayland							
Average 2009	1109	1244	1022	833	720	489	373
High Productivity	1342	1553	1157	1000	865	640	419
Low Productivity	879	1008	759	683	541	390	279
Average 2008	1050	1264	949	775	649	450	334
Average 2007	815	931	876	560	526	356	327
Average 2006	758	812	767	558	498	346	300
Average 2005	612	674	599	470	451	324	270

value patterns by county cluster were also evident for rangeland—with per-acre values averaging one-half of cropland values.

Across the three eastern regions, average hayland values varied from \$2,952 per acre in the Minnehaha-Moody cluster to \$1,192 per acre in the Grant-Roberts cluster. Hayland values were above \$1,950 per acre in 3 other clusters (CLTU, Bon Homme-Hutchinson-Yankton and Brookings-Lake-McCook) and \$1,600 or lower per acre in the remaining county clusters.

In the North-Central region, average land values in Brown and Spink counties are much higher than those found in other counties, especially for cropland. Most cropland in Brown and Spink counties is located in the James River Valley and is more productive than other land in this region. For example, nonirrigated cropland values averaged \$2,350 per acre in the Brown-Spink county cluster, compared to only \$998 per acre in the Campbell-Potter-Walworth county cluster.

East of the Missouri River, the lowest per-acre values for each agricultural land use are found in the Campbell-Potter-Walworth (CPW) county clusters. This is the only county cluster east of the Missouri River where the average per-acre value of cropland is still less than \$1,000. Cropland values per acre in the CPW cluster are slightly above two-fifths of cropland values in the Brown-Spink county cluster. For other land uses, per-acre land values in the CPW cluster are 50 to 55% of corresponding land values in the Brown-Spink county cluster.

In the Central region, land values for each land use in the Aurora-Beadle-Jerauld county cluster were 22 to 40% higher than land values in the other two county clusters. Land values vary from an average of \$788 per acre for rangeland in the Hughes-Sully county cluster to above \$1,768 for cropland in the Aurora-Beadle-Jerauld county clusters.

Across the 15 county clusters in the regions east of the Missouri River, changes in hayland and rangeland values from 2008 to 2009 were more erratic than changes in cropland values. For example, reported hayland values increased 19 to 20% in two clusters and decreased 18 to 20% in two other clusters. Rangeland values declined from 4 to 12% in five county clusters and increased from 6 to 15% in four other clusters. Cropland values increased in all county clusters (table 2). These patterns of percent change in land value were much different than the previous year (i.e., 2007 to 2008), when land values increased by 20% or more in a majority of the county clusters and more than 10% in almost all county clusters.

For regions west of the Missouri River, average land values for each land use are highest in the South-Central region and lowest in the Northwest region. During the past year, land values increased more rapidly in the Southwest region compared to the South-Central and Northwest regions. The percentage increase in cropland and hayland values was higher than tame pasture and rangeland value changes. Average land values vary from \$277 per acre for rangeland in the Northwest region to \$1,007 per acre for cropland in the South-Central region.

MAJOR REASONS FOR PURCHASE AND SALE OF FARMLAND

During each of the 19 years of the SDSU Farm Real Estate Market Survey, respondents have been asked to provide major reasons for buying and selling farmland in their locality. Almost 93% of respondents provided one or two reasons in each category.

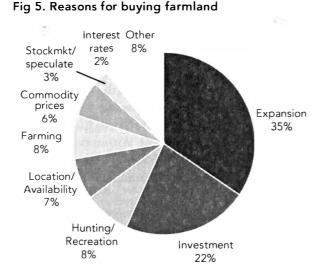
Farm expansion and investment purposes continue as the two most common reasons given for purchasing farmland, with 35% and 22% of total responses, respectively. The next four reasons for purchase, each garnering 6 to 8% of total responses, were hunting/recreation, commodity prices, farming profits, and location/availability (fig. 5).

Farm expansion has always been the most cited reason for buying farmland, but the proportion of responses has declined from 48% of responses in 1994, to 30% in 2007, to 35% of responses in 2009. Another 14% of responses indicated the prospects of continued high commodity prices or high farm profits were the major reasons for purchasing farmland.

Investment purposes (22% of responses) varied from purchasing farmland and speculating on further increases in land values (i.e., a potential to obtain a higher return on investment) to purchasing land and leasing it to local farmers. Farmland potential for fee-based hunting and recreation (8% of responses) can also influence investment decisions. Investment-related and hunting/recreation purposes were more than 40% of responses from 2000 to 2007, but declined to 30% of responses in 2009.

Retirement, estate settlement, and high land prices continue as the main reasons for selling farmland. Retirement or the settlement of an estate was listed by 57% of respondents as reasons for selling farmland. Twenty-nine percent indicated farmland was sold to capitalize on current high land prices and high demand for farmland in today's market. Another 7% listed financial pressures and reducing debt as the main reasons for selling farmland (fig. 6).

In most areas of South Dakota, farmers and ranchers expanding their operation are still the principal buyers of agricultural land. However, their dominance in the local area land market continues to be challenged by investors, both local and non-local, who are interested in purchasing agricultural land for various reasons, including leasing land to local farmers, leasing/developing land for hunting and



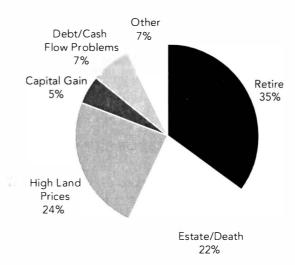
other recreation opportunities, and other motives. The implication is that farm ownership expansion comes at a higher price than before.

CASH RENTAL RATES OF SOUTH DAKOTA'S AGRICULTURAL LAND

Three-eighths of South Dakota's agricultural land acres are in cash, share, or other lease arrangements (SD Census of Agriculture 2002). The cash rental market provides important information on returns to agricultural land. Three-fourths of South Dakota's farmland renters are involved in one or more cash leases for agricultural land. The majority of farmland leases (57%) were fixed cash rate leases, and five-eighths of cash leases were annual renewable agreements (Janssen and Xu 2003).

Respondents were asked about average cash rental rates per acre for nonirrigated cropland, irrigated land, and hayland in their locality. Cash rental rates for pasture/rangeland were provided on a per-acre basis, and if possible, on an Animal Unit Month (AUM)³ basis. Respondents were also asked to report cash rental rates for high-productivity and low-productivity land by different land uses in their locality. Cash rental rates by land use by region are summarized in figure 7 and table 3. The same infor-

Fig 6. Reasons for selling farmland



³ Animal Unit Month (AUM) is defined as the amount of forage required to maintain a mature cow with calf for 30 days. An AUM is somewhat of a generic value and should be about equal across regious. Therefore, private cash lease rates quoted on a per AUM basis should be roughly equivalent in different geographic areas of the state unless there are major differences in forage availability, forage quality, and demand for leased land.

mation is summarized by region and county cluster in table 4.

Cash rental rates differ greatly by region and by land use. For nonirrigated land uses, cash rental rates per acre are highest in the Southeast and East-Central regions and lowest in the Northwest and Southwest regions. In every region, cash rental rates are highest for cropland and lowest for rangeland and pasture (fig. 7 and table 3).

Cash rental rates continued to increase substantially, especially for cropland. In many regions, the percentage increase in cash rental rates was greater than the rate of increase in land values. For most regions, the average annual change in cash rental rate per acre, in both percent and dollar amount, were higher in the past two years than in any of the previous 17 years of the survey.

From 2008 to 2009, statewide average cash rental rates increased \$9.20 per acre for cropland, \$2.75 per acre for hayland, and \$1.30 per acre for pasture and rangeland. The average percentage increase in cash rental rates was 12.3% for cropland, 7.0% for rangeland, and 5.8% for hayland. This is the first time in this decade that the percentage rate of increase in cropland and rangeland cash rental rates was higher than percentage rates of increase for peracre land values.

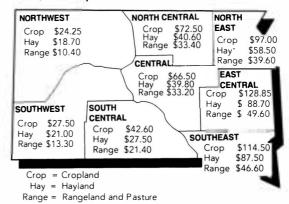
Average cash rental rates for each land use increased in all regions, except in the Northwest region, which showed slight declines for hayland and rangeland and steady cash rental rates for cropland. In general, cash rental rate increases were greatest in the same regions where the strongest land value increases were reported.

2009 cash rental rates – nonirrigated cropland

Average cash rental rates in 2009 for nonirrigated cropland vary from \$24.25 to \$27.50 per acre in the western regions, to \$114.50 per acre in the Southeast region, to \$128.85 per acre in the East-Central region (fig. 7 and table 3).

Average cash rental rates for cropland are highest at \$155.10 per acre in the Minnehaha-Moody county cluster and exceed \$135 per acre in the Clay-Lin-

Fig 7. Average cash rental rate of South Dakota nonirrigated cropland, hayland, and rangeland, by region, 2009, dollars per acre.



Source: 2009 South Dakota Farm Real Estate Market Survey, SDSU.

coln-Turner-Union (CLTU) and Brookings-Lake-Mc-Cook county clusters (table 4). Cash rental rates for high-productivity cropland in these county clusters are above \$200 per acre.

Average cash rental rates vary from \$93 to \$112 per acre across five other county clusters in eastern and north-central South Dakota; the county clusters include Brown-Spink in the North-Central region, Grant-Roberts and Codington-Deuel-Hamlin county clusters in the Northeast region, the five western counties in the East-Central region, and Bon Homme-Hutchinson-Yankton in the Southeast region. Average cash rental rates for high-productivity cropland in these county clusters vary from \$150 to \$162 per acre.

Average cash rental rates in the remaining seven county clusters of the Central, North-Central, Northeast, and Southeast regions vary from \$49.60 per acre in Campbell-Potter-Walworth to \$82.20 per acre in Clark-Day-Marshall. Within these same county clusters, average cash rental rates for high-productivity cropland varied from about \$68 to \$116 per acre (table 4).

Average cash rental rates for high-, average-, and low-productivity cropland are much lower in all regions west of the Missouri River.

Within each region and county cluster, cash rental rate averages for low-productivity cropland are often much lower than those reported for high-produc-

Table 3. Reported cash rental rates of South Dakota agricultural land by type of land by region, 2005–2009.

	South-	East	North-	North-		South-	South-	North-	
Type of Land	east	Central	east	Central	Central	Central	west	west	State
				d	ollars per ac	re			
Nonirrigated Cropland									
Average 2009 rate	114.50	128.85	97.00	72.50	66.50	42.60	27.50	24.25	83.90
High Productivity	168.80	190.60	140.30	112.50	99.15	61.40	37.00	30.20	
Low Productivity	79.70	87.35	65.10	47.90	43.80	29.30	19.30	18.75	
Average 2008 rate	101.90	109.00	87.80	65.70	62.10	37.05	24.50	24.20	74.70
Average 2007 rate	92.30	91.65	77.85	56.75	48.95	32.65	23.35	21.80	64.80
Average 2006 rate	89.25	82.60	70.50	53.85	46.35	34.00	24.70	21.45	60.95
Average 2005 rate	87.20	82.60	65.70	49.40	45.80	31.50	24.90	22.90	58.90
Hayland									
Average 2009 rate	87.50	88.70	58.50	40.60	39.80	27.50	21.00	18.70	50.15
High Productivity	121.40	123.80	82.20	54.10	58.30	42.30	27.80	23.30	
Low Productivity	59.70	62.60	40.40	28.40	28.40	19.90	14.00	14.05	
Average 2008 rate	81.70	80.90	50.80	42.60	38.40	28.00	17.75	20.00	47.40
Average 2007-rate	74.00	67.55	45.10	34.25	31.35	25.70	18.80	18.40	41.35
Average 2006 rate	72.90	60.50	40.20	30.20	34.60	27.30	19.55	18.15	39.80
Average 2005 rate	71.60	56.40	38.70	28.90	29.80	22.20	17.60	18.80	37.20
Average 2003 rate	71.00	30.40	30.70	20.70	27.00	22.20	17.00	10.00	37.20
Pasture/Rangeland									
Average 2009 rate	46.60	49.60	39.60	33.40	33.20	21.40	13.30	10.40	19.80
High Productivity	61.10	70.10	53.10	45.45	48.80	29.30	18.90	13.90	
Low Productivity	32.70	34.20	28.30	23.20	22.20	13.90	8.60	6.60	
Average 2008 rate	45.60	47.15	38.30	31.30	32.25	17.90	10.75	11.00	18.50
Average 2007 rate	44.00	42.80	34.95	28.50	26.85	16.90	11.60	9.95	17.10
Average 2006 rate	42.10	40.00	31.35	25.90	26.30	19.60	10.70	9.25	16.50
Average 2005 rate	40.55	36.05	29.80	24.60	24.95	14.85	10.70	9.75	15.60
			do	ollars per Ani	mal Unit Mo	nth			
Average 2009 rate	26.45	29.40	***	26.40	28.90	27.70	26.65	21.05	
High Productivity	34.50	32.70	***	39.20	36.20	34.75	31.15	26.95	
Low Productivity	19.65	25.20	***	21.05	22.70	18.20	19.50	15.90	
Lowindadenvity	17.00			21.00	22.70	10.20	17.50	13.70	85
Average 2008 rate	29.80	***	***	27.70	27.80	26.90	25.20	21.00	
Average 2007 rate	22.70	***	26.50	27.00	25.35	23.80	24.30	21.95	
Average 2006 rate	25.15	26.00	25.25	23.10	24.45	24.45	24.15	20.85	
Average 2005 rate	21.45	21.10	23.75	22.40	20.60	23.20	22.30	19.45	
	South-	East-	North-	North-					
Type of Land	east	Central	east	Central	Central	Western	State		
			d	lollars per ac	re				
Irrigated land	470.45	150.50	442.40	400.45	100.15	17.50	440.55		
Average 2009 rate	178.15	158.50	143.10	108.65	120.15	67.50	118.55		
High Productivity	226.15	208.50	192.55	144.15	144.30	81.25			
Low Productivity	139.30	133.75	108.20	83.15	95.30	51.25			
Average 2008 rate	154.75	139.80	134.00	87.85	113.00	62.50	106.05		
Average 2007 rate	131.65	113.80	98.70	89.65	89.60	65.30	93.50		
Average 2006 rate	121.20	109.50	96.25	84.75	84.40	60.00	87.25		
Average 2005 rate	118.30	109.30	84.45	80.95	77.95	57.90	83.50		
Average 2004 rate	118.80	103.80	97.50	75.00	73.20	56.90	83.85		

** Insufficient number of reports to make regional estimates
Source: South Dakota Farm Real Estate Market Surveys, SDSU, 2009 and earlier year reports
Statewide average rental rates are based on 2002 regional land use weights

Table 4. Reported cash rental rates of South Dakota agricultural land by region and county clusters, 2005-2009 rates.

		So	utheast			East Central			
	All	Clay Lincoln Turner Union	Bon Homme Hutchinson Yankton	Charles Mix Douglas	All	Minnehaha Moody	Brookings Lake McCook	Sanborn Davison Hanson Kingsbury Miner	
				dollars	per acre				
Nonirrigated Cropland									
Average 2009 rate	114.50	138.90	109.10	75.90	128.85	155.10	135.60	95.70	
High Productivity	168.80	211.05	158.60	102.80	190.60	205.80	212.30	152.95	
Low Productivity	79.70	95.50	74.90	56.20	87.35	108.40	91.75	61.80	
Average 2008 rate	101.90	121.90	96.30	74.90	109.00	140.10	110.90	84.70	
Average 2007 rate	92.30	110.30	88.70	64.20	91.65	118.60	96.00	75.05	
Average 2006 rate	89.25	106.15	82.85	59.65	82.60	109.30	85.75	67.00	
Average 2005 rate	87.20	106.70	76.70	59.10	82.60	102.10	89.10	65.50	
Hayland									
Average 2009 rate	87.50	105.20	92.65	52.25	88.70	117.60	98.70	56.00	
High Productivity	121.40	151.00	126.50	66.90	123.80	157.75	146.90	75.50	
Low Productivity	59.70	73.85	59.90	36.40	62.60	81.55	70.30	40.30	
Average 2008 rate	81.70	99.60	82.80	53.70	80.90	117.40	81.80	58.90	
Average 2007 rate	74.00	88.50	77.90	46.25	67.55	94.15	75.90	52.00	
Average 2006 rate	72.90	85.50	72.55	47.45	60.50	94.15	57.95	48.05	
Average 2005 rate	71.60	91.30	68.10	43.50	56.40	80.10	57.60	41.70	
Pasture/Rangeland									
Average 2009 rate	46.60	53.20	43.20	41.00	49.60	57.50	50.00	44.20	
High Productivity	61.10	67.90	60.90	51.25	70.10	77.40	72.40	63.30	
Low Productivity	32.70	35.75	32.75	28.15	34.20	40.50	35.20	29.00	
Average 2008 rate	45.60	51.35	44.60	39.60	47.15	51.25	51.25	41.50	
Average 2007 rate	44.00	48.00	43.00	39.30	42.80	48.40	43.00	40.10	
Average 2006 rate	42.10	47.70	38.40	36.55	40.00	51.50	41.60	35.65	
Average 2005 rate	40.55	48.65	38.40	30.50	36.05	42.05	34.70	34.10	

Irrigated cropland rental rates per acre and rangeland rental rates per AUM are not reported in this table, due to insufficient number of reports in most county clusters.

Source: South Dakota Farm Real Estate Market Surveys, SDSU, 2009 and earlier reports.

		Nor	theast					
		Codington	P. S.	Clark			Edmund	Campbell
		Deuel	Grant	Day		Brown	Faulk	Potter
	All	Hamlin	Roberts	Marshall	All	Spink	McPherson	Walworth
				dollars	per acre			
Nonirrigated Cropland								
Average 2009 rate	97.00	112.00	100.70	82.20	72.50	93.70	58.10	49.60
High Productivity	140.30	161.70	152.10	116.00	112.50	150.50	90.60	67.90
Low Productivity	65.10	72.30	71.40	59.90	47.90	62.20	39.70	31.05
Average 2008 rate	87.80	95.80	87.85	78.95	65.70	86.60	57.60	47.65
Average 2007 rate	77.85	84.20	80.00	67.70	56.75	76.30	48.05	39.25
Average 2006 rate	70.50	77.00	73.55	63.05	53.85	68.85	46.60	40.35
Average 2005 rate	65.70	71.90	68.40	57.30	49.40	64.80	42.50	38.70
Hayland								
Average 2009 rate	58.50	72.20	**	46.40	40.60	49.20	37.00	31.40
High Productivity	82.20	103.80	**	65.90	54.10	64.70	56.30	39.60
Low Productivity	40.40	50.40	**	31.05	28.40	35.60	25.00	21.00
Average 2008 rate	50.80	56.90	52.50	39.40	42.60	60.60	33.85	32.40
Average 2007 rate	45.10	51.30	45.00	38.25	34.25	44.55	33.00	22.20
Average 2006 rate	40.20	50.70	33.00	31.45	30.20	34.20	30.75	24.70
Average 2005 rate	38.70	41.40	41.60	31.40	28.90	35.40	28.20	21.20
Pasture/Rangeland								
Average 2009 rate	39.60	45.15	37.90	34.60	33.40	39.25	34.30	22.60
High Productivity	53.10	63.00	45.00	47.00	45.45	49.40	47.60	36.60
Low Productivity	28.30	31.40	26.40	26.00	23.20	28.10	24.90	13.20
Average 2008 rate	38.30	42.40	37.00	33.65	31.30	39.70	30.00	22.10
Average 2007 rate	34.95	40.35	31.45	29.70	28.50	33.70	29.65	18.15
Average 2006 rate	31.35	36.80	29.45	27.75	25.90	31.60	27.25	16.90
Average 2005 rate	29.80	34.05	28.35	26.35	24.60	29.60	25.15	17.10

Table 4. (continued)

		Cei	ntral		South Central	South West	North West
	-		Buffalo				11001
		Aurora	Brule				
		Beadle	Hand	Hughes			
	All	Jerauld	H <u>y</u> de	Sully	All	All	All
Nonirrigated Cropland				dollars per ac	re		
Average 2009 rate	66.50	74.10	60.20	57.50	42.60	27.50	24.25
High Productivity	99.15	113.70	89.10	78.75	61.40	37.00	30.20
Low Productivity	43.80	48.00	41.20	37.50	29.30	19.30	18.75
	(0.40	40.00	50.40	54.40	27.05	24.50	24.00
Average 2008 rate	62.10	68.20	59.60	54.40	37.05	24.50	24.20
Average 2007 rate	48.95	58.00	45.40	43.75	32.65	23.35	21.80
Average 2006 rate	46.35	53.40	42.10	42.40	34.00	24.70	21.45
Average 2005 rate	45.80	49.50	41.50	45.00	31.50	24.90	22.90
Hayland							
Average 2009 rate	39.80	43.55	34.60	**	27.50	21.00	18.70
High Productivity	58.30	62.60	55.55	**	42.30	27.80	23.30
Low Productivity	28.40	30.70	25.90	**	19.90	14.00	14.05
Average 2008 rate	38.40	42.10	40.00	29.60	27.95	17.75	20.00
Average 2007 rate	31.35	38.70	30.95	21.00	25.70	18.80	18.40
Average 2006 rate	34.60	37.90	31.95	**	27.30	19.55	18.15
Average 2005 rate	29.80	36.50	26.50	17.50	22.20	17.60	18.80
Pasture/Rangeland							
Average 2009 rate	33.20	37.90	29.70	25.00	21.40	13.30	10.40
High Productivity	48.80	56.50	43.60	34.30	29.30	18.90	13.90
Low Productivity	22.20	24.60	21.40	16.00	13.90	8.60	6.60
Average 2008 rate	32.25	38.60	31.50	21.50	17.90	10.75	11.00
Average 2007 rate	26.85	33.20	27.10	19.45	16.90	11.60	9.95
Average 2007 rate Average 2006 rate	26.30	30.10	25.80	20.20	19.60	10.70	9.25
Average 2005 rate	24.95	29.30	23.80	18.70	14.85	10.70	9.23 9.75
Average 2003 rate	24.73	27.30	23.00	10.70	14.05	10.70	7./3

 $[\]ensuremath{^{**}}$ insufficient number of reports to make estimates at the regional level

tivity cropland. For example, reported average cash rent for nonirrigated cropland in the East-Central region is \$87.35 per acre for low-productivity cropland and \$190.60 per acre for high-productivity cropland. In the Northwest region, the average cash rent for low-productivity cropland is \$18.75 per acre, while cash rental rates for high-productivity cropland average \$30.20 per acre (table 3). The variability in cropland cash rental rates within regions and county clusters was greater in 2009 than in earlier survey periods.

Cropland cash rental rates from 2008 to 2009 were stable in the Northwest region and increased from 7 to 19% in all other regions. The average dollar amounts of increase were highest in the eastern regions, with per-acre increases varying from \$19.85 in the East-Central region, to \$12.60 in the Southeast region, to \$9.20 in the Northeast region. In the Southwest region and the three central regions, the average amount of increase varied from \$3.00 to \$6.80 per acre.

At the county cluster level, cash rental rates increased from a high of \$24.20 per acre in the Brookings-Lake-McCook county cluster to \$1.00 or less per acre in the Charles Mix-Douglas, Brule-Hand-Hyde, and Edmunds-Faulk-McPherson county clusters. Peracre increases in cash rental rates varied from \$10.00 to \$17.00 per acre in six of the nine county clusters in the three eastern regions and from \$1.95 to \$7.10 in the remaining five county clusters of the Central, North-Central, and Northeast regions.

Cash rental rates – hayland and irrigated land

East of the Missouri River, cash rental rates for hayland vary from \$39.80 to \$40.60 per acre, respectively, in the Central and North-Central regions, to \$87.50 and \$88.70, respectively, in the Southeast and East-Central regions (fig. 7 and table 3). West of the Missouri River, hayland cash rental rates in 2009 vary from an average of \$18.70 per acre in the Northwest region to \$27.50 per acre in the South-Central region.

Four county clusters in the East-Central and Southeast regions have average cash rental rates for hayland above \$90 per acre, while the Codington-Deuel-Hamlin cluster of the Northeast region has an average rate of \$72.20. The remaining county clusters have average cash rental rates for hayland between \$31.40 and \$52.25 per acre. The two highest average cash rental rates of \$117.60 and \$105.20 per acre are found in Minnehaha-Moody and CLTU, respectively. East of the Missouri River, the lowest cash rental rates of \$31.40 per acre are found in the Campbell-Potter-Walworth cluster (table 4).

Statewide, cash rental rates for hayland increased an average of \$2.75, or 5.6%. Slight declines (decline of \$2.00 or less per acre) in per-acre hayland cash rental rates occurred in the North-Central, South-Central, and Northwest regions, while there were per-acre increases of \$1.40 in the Central region and \$3.25 in the Southwest region. In the three eastern regions, hayland cash rental rates increased from \$5.80 in the Southeast region to \$7.80 per acre in the East-Central and Northeast regions. The amount of change in cash rental rates was even more variable across county clusters.

Within each region and county cluster there are considerable differences in average cash rental rates between high- and low-productivity hayland. For example, the average rental rates for high- and low-productivity hayland in Minnehaha-Moody are \$157.75 and \$81.55 per acre, respectively, compared to \$23.30 and \$14.05 per acre in the Northwest region. In many regions the lower cash rental rates are reported for native hayland, while the higher rates are quoted for alfalfa or other tame hayland.

Cash rental rates for irrigated land vary from an average of \$67.50 per acre in western South Dakota, to \$10.8.65 per acre in the North-Central region, to \$178.15 per acre in the Southeast region (table 3). Reported cash rental rates increased in all regions, varying from increases of \$5.00 in the Western region to \$23.40 in the Southeast region.

2009 cash rental rates - rangeland and pasture

Nearly three-eighths of South Dakota's 26.2 million acres of rangeland and pasture acres are leased to farmers and ranchers. Several million acres of rangeland in western and central South Dakota are controlled by federal, state, or tribal agencies and are leased to ranchers using cash leases or grazing permits. A majority of leased rangeland and almost

all leased pasture are cash rented from private all leased pasture are cash rented from private all landlords (Janssen and Xu 2003). Respondents were asked to report 2009 cash rental rates per acre and per AUM on privately owned rangeland and pastureland in their locality.

Average cash rental rates per acre reflect regional differences in productivity and carrying capacity of pasture and rangeland tracts. Average cash rental rates vary from \$10.40 to \$13.30 per acre in western South Dakota, to \$46.60 per acre in the Southeast region, to \$49.60 in the East-Central region. Typical cash rental rates for low-productivity and high-productivity rangeland vary from \$6.60 to \$13.90 per acre in the Southwest region and from \$34.20 to \$70.10 per acre in the East-Central region (fig. 7 and table 3).

In counties east of the Missouri River, average cash rental rates for rangeland and pasture vary from a high of \$57.50 to \$53.20 per acre, respectively, in the Minnehaha-Moody and CLTU clusters, to a low of \$25.00 in the Hughes-Sully cluster, to \$22.60 per acre in the Campbell-Potter-Walworth cluster (table 4).

The dollar amount and percentage change in pasture cash rental rates from 2008 to 2009 was considerably lower in most regions and county clusters than were changes in cash rental rates for hayland or cropland. Average cash rental rates declined slightly in the Northwest region and in five county clusters east of the Missouri River. The amount of decline varied from \$0.45 to \$1.80. The amount of positive change in cash rental rates varied from about \$1.00 per acre in the Central and Southeast region, to \$3.50 per acre in the South-Central region, to \$6.25 per acre in the Minnehaha-Moody county cluster.

Rangeland rates per AUM in 2009 vary from an average of \$21.05 per AUM in the Northwest region to \$29.40 per AUM in the East-Central region. Rates in the three central regions and in the Southwest region varied from \$26.40 to \$28.90 per AUM and increased from 2008 to 2009.

Publications on agricultural land rental arrangements in South Dakota

There are several recent (i.e., 2007) publications available from South Dakota State University Exten-

sion Economics. These publications address issues for landlords and tenants and summarize some issues that should be considered when entering into lease agreements. Also available through these publications are worksheets that can be used to assist in the determination of equitable lease rates. These Extension publications by Dr. Burton Pflueger are in the reference list and are a few of the resources available from the Economics Department at South Dakota State University. Additional publications and related decision aid resources are available at http://econ.sdstate.edu.

RATES OF RETURN TO SOUTH DAKOTA'S A GRICULTURAL LAND

Two approaches—gross rates of return and net rates of return—are used in each annual survey to obtain information on current rates of return to agricultural land. The 1991 to 2009 trends of gross rent-to-value ratio by land use and of net rate of return by land use are depicted in figures 8a and 8b, respectively.

First, gross rent-to-value ratios (gross cash rent as a percent of land value) are calculated from respondents' reported cash rental rates and estimated values of leased land. Gross rent-to-value ratio is a measure of the **gross rate of return** obtained by landlords, before deduction of property taxes and other landlord expenses.

In 2009, the statewide average gross rate of return (rent-to-value ratio) is 4.7% for nonirrigated cropland, 4.5% for hayland, 4.1% for rangeland, and 4.3% for all agricultural land. Since gross cash rents increased at a higher percentage rate than land values in most regions, the trend of declining rent-to-value ratios was halted or perhaps reversed. This is the fourth consecutive year that gross rates of return have been lower than 5% for all-agricultural land, compared to an average of 7.4% during the 1990s, and 6.1% from 2000 to 2005 (table 5).

The practical range of gross rate of return is obtained for the middle 90% of the distribution of responses for each land use. For most respondents, the estimated rent-to-value ratio (gross rate of return) for 2009 varies from 3.2 to 6.25% for cropland, from 2.8 to 6.75% for hayland, and from 2.4 to



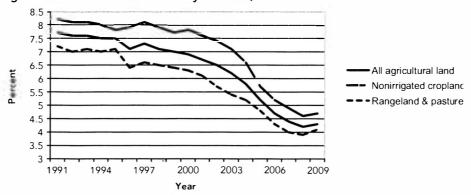
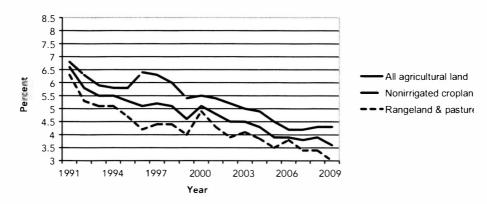


Fig 8b. Net rent to return by land use, 1991-2009



Source: 2009 SDSU Farm Real Estate Market Survey and earlier publications.

Table 5. Estimated rates of return to South Dakota agricultural land by type of land and by region, 1991–2009

Type of land-statewide ^c	2009	2008	2007 GROS	2006 S rate o	Average 2000–2005 f return (%)°	Average 1991–1999	2009	2008	2007 NET 1	2006	Average 2000–2005 return (%) ^b	Average 1991–1999
All agricultural land	4.3	4.2	4.4	4.7	6.1	7.4	3.6	3.9	3.8	3.9	4.4	5.4
Nonirrigated cropland	4.7	4.6	4.4	5.2	6.9	8.0	4.3	4.3	4.2	4.2	5.0	6.1
Rangeland & pasture	4.1	3.9	4.0	4.3	5.4	6.8	3.0	3.4	3.4	3.8	3.9	4.8
Hayland	4.5	4.4	4.8	5.2	6.8	8.0	3.8	4.2	3.9	4.0	4.6	5.6
Region ^d			GROS	S rate o	of return (%)		NET rate of return (%)					
Southeast	4.1	4.2	4.7	5.0	6.5	7.4	3.8	4.4	4.4	4.1	4.9	5.9
East-Central	4.0	3.7	3.8	4.4	6.2	7.6	3.8	3.8	3.8	4.1	4.9	5.5
Northeast	4.2	4.2	4.6	4.9	6.9	8.1	4.2	4.2	3.8	3.9	5.1	6.2
North-Central	4.6	4.5	4.9	5.2	6.4	7.9	4.2	4.2	4.4	4.4	5.1	6.1
Central	3.9	4.0	4.2	4.6	6.2	7.7	4.0	5.3	4.2	4.1	4.4	5.3
South-Central	4.2	3.8	4.5	5.1	6.0	6.9	3.5	4.3	3.8	4.0	4.4	5.2
Southwest	4.1	3.5	4.3	4.2	5.6	6.7	2.6	3.2	3.0	3.1	3.8	4.4
Northwest	4.3	5.1	4.4	4.7	5.7	7.1	3.4	3.4	3.4	4.0	3.8	5.1

^{*}GROSS rate of return (percent) is calculated by dividing the average gross cash rental rate by reported value of rental land.

Source: South Dakota Farm Real Estate Survey, SDSU, 2009 and earlier reports.

^bNET rate return is the reporter's estimate of the percentage rate of cash return to ownership given current land values. Appraisers often refer to this measure as the market capitalization rate.

^{&#}x27;State level GROSS and NET rate of return estimates are calculated by weighting regional estimates by proportion of acres of each land use by region.

dRegional level GROSS and NET rate of return estimates are calculated by weighting the rate of return estimates for each land use by proportion of the region agricultural acres in each land use.

6.25% for rangeland. The median rent-to-value ratio is 4.4% for cropland, 4.2% for hayland, and 3.7% for rangeland.

Second, respondents were asked to estimate the current **net rate of return** (percent) that landowners in their locality could expect given current land values. Appraisers refer to the current annual net rate of return as the "market-derived capitalization rate," which is widely used in the *income approach* to farmland appraisal. The net rate of return is a return to agricultural land ownership **after** deducting property taxes, real estate maintenance, and other ownership expenses.

Average net rates of return for 2009 varied from 4.3% for nonirrigated cropland, to 3.8% for hayland, to 3.0% for rangeland and pasture, and averaged 3.6% for all agricultural land. This is the fourth consecutive year that average net rates of return for all agricultural land were below 4%, compared to an average of 5.4% during the 1990s and 4.4% from 2000 to 2005.

The practical range of net rates of return to land for 2009 reported by respondents varies from 2.0 to 7.75% for cropland, from 1.5 to 7.5% for hayland, and 1.0 to 5.0% for rangeland. The median net rate of return was 4.0% for cropland, 3.5% for hayland, and 3.0% for rangeland.

LONGER-TERM PERSPECTIVE ON FARMLAND MARKET CHANGES, 1991–2009

Longer-term historical data from annual SDSU surveys of agricultural land values and cash rental rates in South Dakota from 1991 to 2009 are located in appendix tables 2 and 3 of this report. Long-term trends in average annual cash rates of return are shown in figures 8a and 8b. Regional and statewide comparisons of annual percentage changes for all agricultural land values in three periods (1991 to 1996, 1996 to 2001, and 2001 to 2009) are shown in figure 9.

Based on 19 years of examining trends in agricultural land values, cash rental rates, and rates of return by land use and across regions, a few key observations are offered.

First, agricultural land values increased more rapidly from 2001 to 2009 than in the earlier periods (fig. 9). From 2001 to 2009, average annual increases in land values were 10% or more in all regions of the state. From 1996 to 2001, average annual increases in land values were between 5 and 9%; from 1991 to 1996, the increases were generally less than 5%.

Second, considerable insight about effects of federal policies on land values is gained by comparing annual rates of land increases for the three time periods. The first period, 1991 to 1996, reflects the effects of the 1990 Farm Bill, continued recovery of the farm sector from the farm financial crisis of the mid-1980s, and long-term farm mortgage interest rates averaging 8 to 10%. The second period, 1996 to 2001, reflects the impacts of the 1996 Farm Bill and subsequent increases in federal farm program spending. However, there were no major changes in farm mortgage interest rates from the earlier period.

The third period, 2001 to 2009, reflects the impacts of major reductions in farm mortgage interest rates, continued farm program support, and relatively low rates of inflation until 2007. Federal policy shifting in favor of renewable fuels and the growing importance of ethanol production from corn has further increased commodity prices and indirectly contributed to increased cash rental rates and land values.

Third, cash rates of return (gross-cash-rent-to-land-value ratio) to agricultural land were relatively stable from 1991 to 2000 and declined substantially from 2001 to 2008, before stabilizing in 2009. These findings indicate that increased land values during the 1990s were supported by comparable increases in cash rental rates. However, from 2001 to 2008, cash rental rates increased at a slower rate than land values, which illustrates the much greater impact that reduced interest rates have on land values than they have on cash rental rates. During all 19 years, aver-

¹ The market-derived income capitalization rate used by appraisers is equal to net returns to land divided by its current market value. One widely used method of estimating net return to agricultural land is subtracting property taxes, land maintenance expense, and other land ownership expenses from the gross cash rental rate for the same land. In each SDSU Farmland Market Survey, respondents were requested to estimate this net rate of return by land use for agricultural land in their locality.

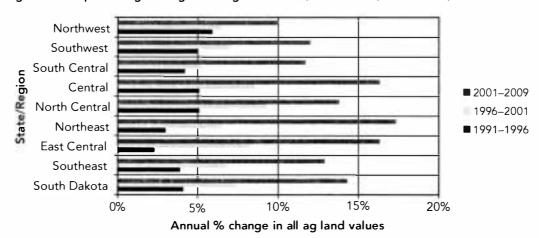


Fig 9. Annual percentage change in all ag land values, 1991-1996, 1996-2001, and 2001-2009

age rates of return to cropland exceeded average rates of return to rangeland (fig. 8).

Fourth, cash rates of return likely have reached the lower end of historical rates of return to agricultural land in South Dakota. From 2001 to 2008, farmland investors were in speculative market conditions where most of the total returns were from expectations of capital appreciation instead of from current cash returns. This pattern of declining rates of cash return to land also occurs during the latter stages of land market price booms. The national economic recession and financial turmoil in the second half of 2008 may have changed the real estate boom market psychology to reflect a greater emphasis on current income and cash flow.

Fifth, regional and county cluster rankings in peracre land values are relatively stable for most land uses, reflecting fundamental differences in soil productivity and long-term weather patterns and relatively slow shifts in the economic structure of most counties in South Dakota. The greatest changes in land values generally are occurring near growing urban centers, in localities where commercial (fee) hunting has greatly increased, and in areas shifting from wheat and small grains to soybeans and corn. Sixth, land values across counties and regions tend to move together over time, but not at exactly the same time or pace. A typical pattern is three to four years of rapid increases in land values, followed by one or two years of consolidation (or even declines), before the next surge in land values. The timing of the growth and consolidation phases is not identical

across all regions and counties. Thus, a longer-term perspective on land value changes is warranted.

Finally, longer-term trends in agricultural land values show increases above the rate of price inflation in all regions. From 1991 to 2009, the average annual rate of general price inflation has been less than 3%. The statewide average annual rate of increase for all agricultural land was 9.4% during the same period, with regional variation from 7.5 to 10% (appendix table 2).

RESPONDENTS' ASSESSMENT OF FACTORS INFLUENCING FARMLAND MARKETS IN SOUTH DAKOTA

Respondents were asked to list major positive and negative factors affecting the farm real estate market in their localities. These factors help explain changes in the amount of farmland for sale, sale prices, and rental rates. Seventy-seven percent of respondents listed one to three *positive* factors, while 84% listed one to three *negative* reasons. This is one of the few surveys in the past 19 years where more respondents listed negative factors influencing farmland markets than positive factors.

Low interest rates and favorable financing, strong demand for farmland, and relatively high commodity prices were the three major positive factors. Federal farm programs or crop insurance, continued investor interest in farmland, and shifting funds from the stock market were listed by another 9 to 10% of responses (fig. 10). The prospect of lower

commodity prices or land prices, economic recession, uncertain/volatile economy, and rising input costs were the four main negative factors (fig. 11). Numerous factors were also listed in the "Other (positive)" and "Other (negative)" category, but no single factor in the "Other" categories exceeded 2% of responses.

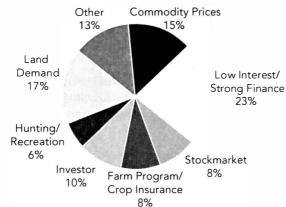
Numerous respondents included comments that many of the negative impacts of the national economic recession had not hit South Dakota's agricultural sector, though they also expressed fears that a downturn could occur in the next 1 to 2 years.

AGRICULTURAL LAND MARKET EXPECTATIONS: PAST AND PROSPECTIVE

In each survey, respondents were asked to estimate the percentage change in land values during the previous year and to forecast percentage changes in land values for the forthcoming year. Nearly 75% of respondents provided their perception of previous-year cropland value changes, compared to 70% for rangeland and 65% for hayland. Two-thirds of respondents projected cropland value changes for next year, compared to 58% estimating changes in rangeland and hayland values.

During the past year, respondents' estimated percentage increases in land values averaged 5.5% for cropland and hayland, and 3.7% for rangeland.

Fig 10. Positive factors in the farm real estate market

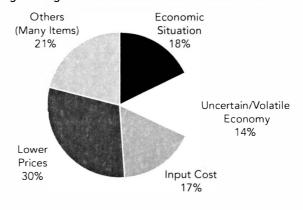


The median increase was 5% for cropland and hayland, and 1.7% for rangeland, compared to median increases of 10% or more reported in each of the previous four years. A majority of respondents reported increases in per-acre values for each land use during the previous 12 months, while 12 to 18% of respondents, depending on land use, reported declines, and 25 to 30% reported no change in value from 12 months earlier. Respondents' perception of land value changes in this survey was much different (more negative) than perceptions reported in past surveys since 2000.

Unique to this survey, respondents were as ked about the percentage change in per-acre values for nonirrigated land during the four to five months preceding the 2009 survey. This time period (Oct. 2008 to Feb. 2009) occurred during the economic turmoil created by the stock market decline, sharply rising unemployment, and federal bailouts of many larger banks, financial companies, and selected other large corporations. We wanted to examine a possible turnaround in agricultural land values as a spillover effect of the economic and financial turmoil that led to the economic recession.

Nearly 85% of respondents provided their response to this land value question. Fifty-five percent indicated that land values were unchanged, 39% indicated land value declines, and only 6% indicated continued land value increases during the four-to five-month period. The mean (average) reported change in land values was -3.5%. Most (>90%) of

Fig 11. Negative factors in the farm real estate market



⁵ The wording of this question was: "During the past year we have seen extraordinary volatility in commodity prices and financial markets. Over the past 4–5 months (October 2008 to February 2009), please estimate the percentage change in per acre values you are seeing for nonirrigated land:"

the respondents that reported a positive change in land values for the previous 12 months also reported that land value changes in the more recent four to five months (Oct. 2008 to Feb. 2009) were negative or zero. Overall, these responses provide qualitative evidence that most or all of the cropland or rangeland value increases in 2008 occurred from January through September—with land values stable or declining from Oct. 2008 to Feb. 2009.

A plurality of respondents, 38 to 48%, depending on land use, who provided forecasts expected land values to decline in the next 12 months, while only 12 to 18% of respondents projected an increase in land values, and the remainder projected no change. The median forecast in per-acre values was zero for all land uses, while the mean (average) forecast in per-acre values varied from -3.5% for rangeland to

-2.8% for cropland. This is the first time in the past 19 years that respondent's forecast of land values for the next year were mostly zero or negative for all land uses.

In summary, respondents to the 2009 survey are not optimistic about further increases in farmland values in the next year, primarily due to uncertain impacts or expected negative impacts of the general economic recession on the farm sector. Prospects of continued rising input expenses, weaker demand for major commodities, and growing concerns about impacts of future federal policies for taxation, credit/finance, and energy have reduced their optimism. However, many respondents also indicate the agricultural sector is reasonably well positioned, from a financial perspective, to withstand many of the negative impacts of the economic recession.

LIST OF REFERENCES **

Federal Reserve Bank of Minneapolis. Agricultural Credit Conditions reports.

http://www.minneapolisfed.org/Research/data/district/.

Janssen, Larry and Xuan Xu. 2003. Farmland leasing in South Dakota. Ag Expt. Station Bulletin 739. South Dakota State University, Brookings, SD.

Janssen, Larry and Burton Pflueger. 2006. South Dakota farmland market trends, 1991–2006. SDSU Ag. Expt. Station Circular 271. Brookings, SD. http:// agbiopubs.sdstate.edu/articles/C271.pdf.

- —. 2007. South Dakota farmland market trends, 1991–2007. SDSU Ag. Expt. Station Circular 272. Brookings, SD. http://agbiopubs.sdstate.edu/articles/C272.pdf
- —. 2008. South Dakota agricultural land market trends, 1991 2008. SDSU Ag. Expt. Station Circular 273. Brookings, SD. http://agbiopubs.sdstate.edu/articles/C273.pdf

Pflueger, Burton. Crop cash lease agreements. Extension Extra 5063. South Dakota State University, 2007. http://agbiopubs.sdstate.edu/articles/ExEx5063.pdf.

- —. Çash farm lease (short version). Extension Extra 5064. South Dakota State University, 2007. http://agbiopubs.sdstate.edu/articles/ExEx5064.pdf.
- —. Crop Share Lease Agreements, Extension Extra 5065. South Dakota State University, 2007. http://agbiopubs.sdstate.edu/articles/ExEx5065.pdf.
- —. Crop Share Farm Lease (Short Version) Extension Extra 5066. South Dakota State University, 2007. http://agbiopubs.sdstate.edu/articles/ExEx5066.pdf.

- —. Flexible-Cash Lease Agreements. Extension Extra 5067. South Dakota State University, 2007. http://agbiopubs.sdstate.edu/articles/ExEx5067. pdf.
- —. Flexible-cash farm lease (short version). Extension Extra 5068. South Dakota State University, 2007. http://agbiopubs.sdstate.edu/articles/ExEx5068.pdf.
- —. Pasture lease agreements. Extension Extra 5071. South Dakota State University, 2007. http://agbio-pubs.sdstate.edu/articles/ExEx5071.pdf.
- —. Pasture lease (short version). Extension Extra 5072. South Dakota State University, 2007. http://agbiopubs.sdstate.edu/articles/ExEx5072.pdf.

South Dakota Bureau of Finance and Management. http://www.state.sd.us/bfm/index.htm.

- U.S. Dept. of Agriculture. 2002 Census of Agriculture, South Dakota. v.41.
- *** Reference citations for annual SDSU Farm Real Estate Survey reports for 1991 through 2004 are not listed above but can be found in the following reports. The annual reports for 1991 and 1992 were published as SDSU Economic Research Reports 91-3 and 92-1. The annual reports from 1993 to 2005 were published as SDSU Agricultural Experiment Station Circulars #256, 257, 258, 259, 260, 262, 263, 264, 266, 267, 268, 269, and 270. Dr. Janssen and Dr. Pflueger, often in collaboration with an SDSU Economics student, were the co-authors of each annual report.

APPENDIX I: SURVEY METHODS AND RESPONDENT CHARACTERISTICS

The primary purpose of the 2009 South Dakota Farm Real Estate Market Survey was to obtain regional and statewide information on 1) 2009 per-acre agricultural land values by land use and land productivity and 2) 2009 cash rental rates by agricultural land use and land productivity. In addition, we obtained respondents' assessments of the positive and negative factors that influenced their local farm real estate market and the motivations for buyer/seller decisions.

Copies of this survey were mailed to potential respondents on Feb. 17; a follow-up mailing occurred on March 11. Potential respondents were persons employed in one of the following occupations: 1) agricultural lenders (senior agricultural loan officers of commercial banks or Farm Credit Service), 2) loan officers or county directors of the USDA Farm Service Agency (FSA), 3) Cooperative Extension Service agricultural educators and area farm management specialists, and 4) licensed appraisers and assessors. Some appraisers were also realtors or professional farm managers, while some lenders were also appraisers.

Respondents were asked to report land values and cash rental rate information for nonirrigated cropland, hayland, rangeland, improved pasture, and irrigated land in their locality. About 30% of respondents provided information for two or more counties, while 70% reported information for one county.

A total of 637 people were contacted, and the total response rate was 40%. The useable survey response rate was 36%. The distribution of 227 respondents by location and reported occupation is shown in appendix table 1. Seventy percent of Farm Service Agency officials, 55% of licensed appraisers, 34% of Extension educators, and 27% of assessors and agricultural lenders contacted provided usable responses. Fifty-eight percent of respondents are agricultural lenders or FSA officials.

Fifty-two percent of the respondents were from the three eastern regions of South Dakota, 23% were from the Central and North-Central regions, and 25% were from South-Central and western regions of South Dakota.

Most respondents were able to supply land value and cash rental rate information for nonirrigated cropland, rangeland, and hayland in their locality. One-third of respondents reported irrigated land values and cash rental rates per AUM on rangeland, and only 27% provided rental rate information on irrigated land.

Regional average land values by land use are simple average (mean) values of usable responses. Statewide average land values by land use are weighted by the relative number of acres in each region in the same land use. All agricultural land values, both regional and statewide, are weighted by the proportion of acres in each agricultural land use. Thus all agricultural land values in this report are weighted average values by region and land use. This weighted average approach is analogous to the cost (inventory) approach of estimating farmland values in rural land appraisal.

This approach has important implications in the derivation of statewide average land values and regional all-land values. For example, the two western regions of South Dakota with the lowest average land values have nearly 61% of the state's rangeland acres, 39% of all agricultural land acres, and only 16% of cropland acres. Our approach increases the relative importance of western South Dakota land values in the final computations and results in lower statewide average land values.

The weighting factors used to develop statewide average land values are based on estimates of agricultural land use for privately owned nonirrigated farmland in South Dakota. The agricultural land values exclude agricultural land (mostly rangeland) leased from tribal or federal agencies, which is mostly located in the western and central regions of the state. Irrigated land is also excluded from regional and statewide all-land values. The land-use weighting factors were developed from county-level data in the 2002 South Dakota Census of Agriculture and other sources.

Regional average rental rates by land use are simple average (mgan) values of useable responses. Statewide average cash rental rates for each land use are weighted by 1) the relative number of acres in each land use and 2) the proportion of farmland acres leased in each region based on 2002 Census of Agriculture data.

Appendix Table 1. Selected characteristics of respondents, 2009.

Number of respondents = 227

Respondents:
Report

Reporting location	N	%	Primary Occupation	Ν	%
Southeast	42	18.5%	Banker/loan officer	90	39.6%
East-Central	37	16.3%	Farm Service Agency	41	18.1%
Northeast	39	17.2%	Assessor	18	7.9%
North-Central	30	13.2%	Appraiser/realtor	55	24.2%
Central	22	9.7%	Extension educators	23	10.1%
South-Central	15	6.6%		227	100.0%
Southwest	21	9.3%			
Northwest	21	9.3%			
	227	100.0%			

Response rates:

Land values	N	%	Cash Rental Rates	Ν	%
Nonirrigated cropland	217	95.6%	Nonirrigated cropland	208	91.6%
Irrigated cropland	78	34.4%	Irrigated cropland	62	27.3%
Hayland	191	84.1%	Hayland	163	71.8%
Rangeland (native)	199	87.7%	Rangeland (acre)	183	80.6%
Pastureland (tame)	157	69.2%	Rangeland (AUM)	74	32.6%

Source: 2009 South Dakota Farm Real Estate Market Survey

Appendix II. Historical data on agricultural land values and cash rental rates by land use by region, South Dakota, 1991–2009

Appendix Table 2. Average reported value and annual percentage change in value of South Dakota agricultural land by type of land by region, 1991–2009.

	South-	East-	North-	North-		South-	South-	North-	CT.4.T.F
Type of Land	east	Central	east	Central	Central	Central	west	west	STATE
All Agricultural Land (nonirrigat	ed)			dolla	ars per acre				
Average value, 2009	2355	2634	1863	1270	1246	690	413	307	1121
Average value, 2008	2168	2473	1714	1179	1152	642	378	295	1041
Average value, 2007	1768	1946	1422	945	899	521	322	285	850
Average value, 2006	1583	1643	1174	849	803	462	286	256	743
Average value, 2005	1372	1427	1029	736	711	414	275	211	650
Average Value, 2004	1147	1162	779	629	594	377	223	192	541
Average value, 2003	1017	903	641	549	522	309	200	177	461
Average value, 2002	930	875	560	501	424	313	202	150	421
Average value, 2001	893	785	519	450	373	284	167	143	384
Average value, 2000	794	673	492	404	352	286	167	131	352
Average value, 1999	740	644	452	378	345	273	166	122	331
Average value, 1998	772	610	452	353	346	280	155	117	328
Average value, 1997	665	591	432	323	302	241	139	111	298
Average value, 1996	643	522	414	294	296	217	126	115	280
Average value, 1995	633	473	419	279	264	222	130	103	268
Average value, 1994	567	497	393	293	255	191	112	94	250
Average value, 1993	548	498	399	254	233	199	111	90	241
Average value, 1992	519	474	368	259	223	186	104	89	231
Average value, 1991	526	466	362	227	225	177	97	84	223
, wordge value, . , , .	020	100	002						
Av annual % change 09/91	8.7%	10.1%	9.5%	10.0%	10.0%	7.9%	8.4%	7.5%	9.4%
Annual % change 09/08	8.6%	6.5%	8.7%	7.7%	8.2%	7.5%	9.3%	4.1%	7.7%
				dolla	ars per acre	1.0			
Nonirrigated Cropland									
Average value, 2009	2741	3155	2305	1673	1577	1007	596	428	1900
Average value, 2008	2510	2894	2076	1532	1450	904	502	399	1733
Average value, 2007	1999	2244	1762	1187	1086	702	426	367	1375
Average value, 2006	1817	1914	1448	1088	986	612	387	342	1211
Average Value, 2005	1556	1659	1255	967	871	568	383	316	1064
Average Value, 2004	1315	1346	973	822	705	541	318	294	882
Average value, 2003	1156	1040	793	716	631	443	290	281	743
Average value, 2002	1057	1019	691	665	524	445	311	244	684
Average value, 2001	1023	911	652	592	456	423	245	223	626
Average value, 2000	910	785	.620	520	436	417	248	208	567
Average value, 1999	866	756	565	488	435	402	246	202	534
Average value, 1998	903	728	564	452	434	399	241	200	534
Average value, 1997	777	699	535	412	386	348	217	188	486
Average value, 1996	751	613	514	372	371	317	214	191	455
Average value, 1995	732	555	522	353	332	326	237	185	437
Average value, 1994	661	590	488	382	331	289	218	169	426
Average value, 1993	655	595	497	326	305	302	197	163	412
Average value, 1992	616	574	460	342	300	287	196	167	400
Average value, 1991	623	554	450	294	300	272	185	153	384
Av annual % change 09/91	8.6%	10.1%	9.5%	10.1%	9.7%	7.5%	6.7%	5.9%	9.3%
Annual % change 09/08	9.2%	9.0%	11.0%	9.2%	8.8%	11.4%	18.7%	7.3%	9.6%

Source: South Dakota Farm Real Estate Market Surveys, SDSU, 2009 and earlier. Statewide values by land use are based on 2002 regional land use weights.

Appendix Table 2. (continued)

Type of Land	South- east	East- Central	North- east	North- Central	Central	South- Central	South- west	North- west	STATE
Type or cand	Cast	Central	Cast		ars per acre		WCJt	West	JIAIL
Rangeland (native)									
Average value, 2009	1258	1458	1125	755	898	570	358	277	530
Average value, 2008	1239	1539	1100	714	836	544	339	271	-508
Average value, 2007	1073	1293	889	634	708	448	295	265	448
Average value, 2006	925	1055	751	548	599	397	255	234	386
Average value, 2005	781	844	667	458	552	346	241	185	332
Average value, 2004	684	764	465	396	456	312	196	167	283
Average value, 2003	609	580	389	345	397	257	176	153	246
Average value, 2002	538	543	353	297	325	260	172	127	221
Average value, 2001	488	478	315	270	284	232	143	124	198
Average value, 2000	456	417	297	253	265	235	143	111	187
Average value, 1999	405	386	276	241	255	220	143	102	177
Average value, 1998	408	346	274	226	256	231	130	98	172
Average value, 1997	364	354	268	204	214	197	116	92	155
Average value, 1996	336	311	250	194	214	177	100	97	147
Average value, 1995	354	303	247	184	197	180	101	83	140
Average value, 1994	319	283	228	184	190	149	85	80	128
Average value, 1993	283	276	232	169	175	157	89	76	125
Average value, 1992	271	267	209	163	159	145	80	74	117
Average value, 1991	268	271	205	147	163	137	74	69	112
Average value, 1771	200	271	203	147	103	137	, -	07	112
Av annual % change 09/91	9.0%	9.8%	9.9%	9.5%	9.9%	8.2%	9.2%	8.0%	9.0%
Annual % change 09/08	1.5%	-5.3%	2.3%	5.7%	7.4%	4.8%	5.6%	2.2%	4.3%
Pasture (tame, improved)dollar	s per acre								
Average value, 2009	1378	1802	1373	827	1042	571	429	314	857
Average value, 2008	1365	1675	1304	795	943	571	384	307	809
Average value, 2007	1167	1461	987	698	760	524	303	297	684
Average value, 2006	1085	1166	843	598	711	425	283	282	596
Average Value, 2005	937	1018	730	465	610	397	291	227	519
Average Value, 2004	754	818	517	424	518	337	217	198	420
Average value, 2003	683	710	448	389	493	294	191	163	372
Average value, 2002	639	607	391	327	345	287	193	156	327
Average value, 2001	564	522	342	301	332	258	176	153	297
Average value, 2000	516	481	334	289	303	268	167	144	279
Average value, 1999	453	437	314	266	290	240	161	125	256
Average value, 1998	461	406	297	264	302	272	161	120	254
Average value, 1997	416	373	299	236	265	222	138	114	230
Average value, 1996	379	358	279	231	258	188	127	115	217
Average value, 1995	385	346	262	218	214	214	117	102	206
Average value, 1994	371	335	251	200	224	194	109	93	196
Average value, 1993	326	333	249	194	194	193	104	98	188
Average value, 1992	328	306	257	194	190	176	100	88	182
Average value, 1991	315	325	252	170	199	163	92	94	179
Av annual % change 09/91	8.5%	10.0%	9.9%	9.2%	9.6%	7.2%	8.9%	6.9%	9.1%
Annual % change 09/08	1.0%	7.6%	5.3%	4.0%	10.5%	0.0%	11.7%	2.3%	5.9%

Appendix Table 2. (continued)

Type of Land Hayland Average value, 2009	2098 1871	Central 2116	east	Central doll	Central ars per acre	Central	west	west	STATE
•		2116		doll	ars per acre				
•		2116							
Average value, 2009		2116							
, iverage value, zee,	1871		1387	962	1109	720	488	373	1142
Average value, 2008	1071	2127	1347	939	1050	649	450	334	1079
Average value, 2007	1659	1637	1028	750	815	525	356	327	875
Average value, 2006	1383	1371	831	640	758	499	346	300	758
Average value, 2005	1312	1203	780	515	612	451	324	270	675
Average value, 2004	1008	992	586	432	516	391	265	245	549
Average value, 2003	932	770	488	379	486	310	228	227	474
Average value, 2002	863	770	412	352	375	325	238	204	439
Average value, 2001	844	735	359	332	337	281	201	181	406
Average value, 2000	722	577	330	317	310	293	203	175	365
Average value, 1999	619	562	317	278	293	294	194	163	340
Average value, 1998	668	504	330	265	295	291	178	149	335
Average value, 1997	553	507	316	262	253	258	169	150	307
Average value, 1996	568	451	314	219	273	232	156	146	293
Average value, 1995	562	365	336	213	229	230	164	145	279
Average value, 1994	489	409	279	235	237	204	137	124	263
Average value, 1993	435	398	275	188	205	204	140	121	244
Average value, 1992	416	336	237	179	197	193	135	119	226
Average value, 1991	461	358	252	169	190	197	126	122	233
Av annual % change 09/91	8.8%	10.4%	9.9%	10.1%	10.3%	7.5%	7.8%	6.4%	9.2%
Annual % change 09/08	12.1%	-0.5%	3.0%	2.4%	5.6%	10.9%	8.4%	11.7%	5.8%

Appendix Table 3. Reported cash rental rates of South Dakota agricultural land by type of land by region, 1991–2009.

	South-	East	North-	North-		South-	South-	North-	State
Type of Land	east	Central	east	Central	Central	Central	west	west	
				dolla	ars per acre				
Nonirrigated Cropland									
Average 2009 rate	114.50	129.00	97.00	72.60	66.50	42.60	27.50	24.25	83.90
Average 2008 rate	101.90	109.00	87.80	65.70	62.10	37.05	24.50	24.20	74.70
Average 2007 rate	92.30	91.65	77.85	56.75	48.95	32.70	23.35	21.80	64.80
Average 2006 rate	89.25	82.60	70.50	53.85	46.35	34.00	24.70	21.45	60.95
Average 2005 rate	87.20	82.6	65.70	49.40	45.80	31.50	24.90	22.90	58.90
Average 2004 rate	83.70	78.80	- 64.50	47.60	43.40	34.10	23.10	21.40	56.80
Average 2003 rate	78.80	74.70	59.50	44.90	40.60	29.20	22.00	21.00	53.25
Average 2002 rate	76.50	69.80	57.50	42.20	35.95	29.40	22.60	20.40	50.65
Average 2001 rate	72.95	64.60	52.20	37.80	35.30	27.20	20.10	17.50	47.00
Average 2000 rate	67.50	56.40	49.30	36.20	31.90	30.00	18.70	18.70	43.70
Average 1999 rate	63.20	56.00	46.20	36.00	33.20	27.00	19.50	16.90	42.30
Average 1998 rate	65.20	55.00	45.30	34.70	30.90	25.90	19.00	17.90	41.75
Average 1997 rate	57.40	49.20	44.70	32.70	29.30	23.60	19.10	19.30	38.70
Average 1996 rate	54.70	45.30	41.50	28.70	26.30	21.60	17.00	16.00	35.50
Average 1995 rate	52.50	42.10	40.40	27.60	25.10	21.00	17.60	15.90	34.05
Average 1994 rate	51.90	45.10	40.30	29.80	25.00	22.10	17.60	14.90	34.85
Average 1993 rate	51.80	47.10	40.30	26.60	24.20	22.80	16.60	14.60	34.40
Average 1992 rate	48.00	45.70	39.70	25.50	22.70	21.40	17.70	15.10	33.00
Average 1991 rate	49.30	43.20	38.50	24.50	23.20	22.20	15.90	13.50	32.40
Hayland									
Average 2009 rate	87.50	88.70	58.50	40.60	39.80	27.50	21.00	18.70	50.15
Average 2008 rate	81.70	80.90	58.50	42.60	38.40	28.00	17.75	20.00	47.40
Average 2007 rate	74.00	67.55	47.40	34.25	31.35	25.70	18.80	18.40	41.60
Average 2006 rate	72.90	60.50	40.20	30.20	34.60	27.30	19.55	18.15	39.80
Average 2005 rate	71.60	56.40	38.70	28.90	29.80	22.20	17.60	18.80	37.20
Average 2004 rate	68.50	53.40	36.80	27.10	28.40	24.80	18.50	17.70	36.05
Average 2003 rate	67.20	49.40	34.60	26.20	27.50	19.80	17.80	19.80	34.15
Average 2002 rate	63.70	49.20	31.00	23.40	21.10	20.40	15.50	17.50	31.70
Average 2001 rate	61.20	47.60	28.90	21.00	23.30	18.10	15.90	14.70	30.20
Average 2000 rate	57.80	40.10	28.80	20.30	21.10	19.40	15.10	14.30	28.45
Average 1999 rate	48.50	40.10	22.80	20.40	20.60	19.60	14.80	15.40	26.40
Average 1998 rate	51.40	40.50	24.60	19.40	20.90	18.90	14.20	13.60	27.10
Average 1997 rate	46.10	36.80	28.20	18.70	19.90	16.70	14.90	14.60	25.40
Average 1996 rate	41.50	32.30	26.00	17.00	18.60	15.20	12.60	11.20	22.70
Average 1995 rate	43.80	28.20	25.30	16.70	16.10	14.90	11.10	11.10	21.90
Average 1994 rate	39.50	31.40	23.60	17.00	17.80	15.50	1-1.90	11.30	21.90
Average 1993 rate	35.60	32.10	22.00	14.70	16.40	16.00	11.30	9.50	20.60
Average 1992 rate	33.30	25.90	20.00	14.20	15.60	15.60	11.40	12.10	19.20
Average 1991 rate	38.50	30.90	22.30	14.20	15.70	14.80	12.10	10.40	20.70

Source: South Dakota Farm Real Estate Market Surveys, SDSU, 2009 and earlier year reports. Statewide rental rates based on 2002 land use weights

Appendix Table 3. (continued)

	South-	East	North-	North-		South-	South-	North-	State
Type of Land	east	Central	east	Central	Central	Central	west	west	
Pasture/Rangeland				doll	ars per acre				
Average 2009 rate	45.60	49.60	39.60	33.40	33.20	21.40	14.30	10.40	19.80
Average 2007 rate Average 2008 rate	45.60	47.15	38.30	31.30	32.25	17.90	10.75	11.00	18.50
Average 2000 rate Average 2007 rate	44.00	42.80	34.95	28.50	26.85	16.90	11.60	9.95	17.10
Average 2006 rate	42.10	40.00	31.35	25.90	26.30	19.60	10.70	9.25	16.50
Average 2005 rate	40.55	36.05	29.80	24.60	24.95	14.85	10.70	9.75	15.60
Average 2003 rate Average 2004 rate	37.40	35.90	27.20	22.20	23.90	17.30	10.00	7.90	14.60
Average 2004 rate Average 2003 rate	35.20	32.40	25.30	20.30	23.00	16.40	8.60	7.70	13.65
Average 2002 rate	33.70	32.40	23.70	18.70	19.70	15.60	8.90	7.70	12.90
Average 2002 rate Average 2001 rate	30.90	30.40	21.00	17.50	20.80	12.90	8.60	6.60	11.95
Average 2001 rate	31.00	26.80	20.60	17.30	18.50	15.40	8.00	6.80	11.95
3			19.70		17.80	14.70	7.70		11.20
Average 1999 rate	26.80	24.80		16.60				6.20	
Average 1998 rate	28.10	24.40	19.40	16.40	17.50	14.90	7.30	6.70	11.30
Average 1997 rate	25.70	23.60	19.50	15.20	16.80	13.00	6.60	6.80	10.70
Average 1996 rate	21.20	22.10	18.80	14.70	16.30	12.00	5.60	6.10	9.80
Average 1995 rate	21.90	21.60	18.60	14.90	14.80	11.20	6.10	6.30	9.75
Average 1994 rate	20.30	20.90	18.60	13.40	16.30	11.20	5.40	5.60	9.25
Average 1993 rate	20.30	20.10	17.00	12.70	15.20	10.10	5.60	5.10	8.70
Average 1992 rate	18.00	19.60	16.50	12.00	13.50	9.50	5.30	4.90	8.20
Average 1991 rate	19.20	18.60	16.30	12.50	13.80	9.90	5.30	4.40	8.10
			doll	ars per Anim	nal Unit Mo	nth			
Average 2009 rate	26.45	29.40	***	26.40	28.90	27.70	26.65	21.05	
Average 2008 rate	29.80	***	***	27.70	27.80	26.90	25.20	21.00	
Average 2007 rate	22.70	***	26.50	27.00	25.40	23.80	24.30	21.90	
Average 2006 rate	25.15	26.00	25.25	23.10	24.45	24.45	24.15	20.85	
Average 2005 rate	21.45	21.10	23.75	22.40	20.60	23.20	22.30	19.45	- 4
Average 2004 rate	21.30	***	***	21.10	24.00	23.60	21.90	19.80	
Average 2003 rate	20.30	***	200	20.40	20.40	21.50	19.90	19.30	
Average 2002 rate	20.70	18.00	17.70	16.30	16.30	21.20	19.10	17.60	
Average 2001 rate	20.00	21.00	18.60	16.80	17.40	19.80	17.80	15.75	
Average 2000 rate	18.70	17.90	19.80	15.50	17.40	19.20	16.20	16.70	
Average 1999 rate	18.50	15.80	18.80	15.40	16.30	18.50	16.50	16.40	
Average 1998 rate	16.00	19.00	17.70	15.00	19.80	19.10	16.10	16.30	
Average 1997 rate	17.60	18.00	16.20	13.40	17.00	17.30	15.90	16.10	
Average 1996 rate	17.50	16.70	15.60	14.70	16.30	16.60	16.40	16.20	
Average 1995 rate	17.30	16.70	13.60	15.00	16.10	16.80	16.40	15.50	
Average 1994 rate	15.40	15.00	15.60	14.80	16.50	17.00	15.60	16.50	
Average 1993 rate	15.60	13.90	14.25	13.25	14.90	16.40	15.40	14.50	
Average 1993 rate Average 1992 rate	15.40	14.50	12.50	13.25	15.50	15.40	14.00	15.00	
Average 1772 rate	13.40	14.50	12.30	13.10	13.30	13.70	14.00	13.00	

*** Insufficient number of reports.
Source: South Dakota Farm Real Estate Market Surveys, SDSU, 2009 and earlier year reports.